

Forsyth Technical Community College

**1991 - 1993
General Catalog**

Winston-Salem, North Carolina

Forsyth Technical Community College

General Catalog 1991 - 1993

**Main Campus
2100 Silas Creek Parkway
(919) 723-0371**

**West Campus
1300 Bolton Street
(919) 760-2373**

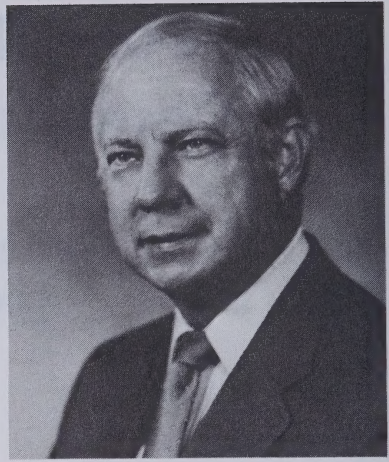
Winston-Salem, North Carolina 27103-5197

All statements in this publication are announcements of present policies and are subject to change at any given time without prior notice. Forsyth Technical Community College reserves the right to make changes in program requirements and offerings, in regulations, and in fees. FTCC also reserves the right to discontinue at any time programs or courses described in this publication. While every effort will be made to give advance notice of any changes of programs or courses, such notice is neither guaranteed nor required. FTCC further reserves the right, at any time, to request the student to withdraw when it considers such action to be in the best interest of the student and FTCC.

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An Equal Opportunity Educational Institution

A MESSAGE FROM THE PRESIDENT



Forsyth Technical Community College is one of fifty-eight institutions in North Carolina making up the community college system. An "open door" admission policy makes continuing one's education a reality for many individuals wishing to apply. Every effort is made to provide quality programs at reasonable cost. The instructional programs are strategically planned and regularly updated to ensure maximum success for our graduates in securing and retaining employment and making career advancement.

Our students are the reason for the existence of this college. The decision to take advantage of the educational opportunities and ensuing benefits is up to you. The administration and faculty are available to assist you and to provide you the best instruction available in the North Carolina Community College System.

This catalog describes courses and programs that may very well hold the key to your future educational success and personal happiness. As you review the program offerings you will find numerous technical and vocational programs and a college transfer program. Your enrollment in, and successful completion of, one of the programs may be the best investment you can make toward reaching your career goals.

Programs for enrichment and self-improvement of the adult community are also offered by FTCC. Adults may enroll in classes to improve existing skills, achieve competency in subject areas leading to a high school diploma, or receive instruction in other academic, vocational, or technical fields.

FTCC has modern facilities and up-to-date equipment to assure you of an excellent learning environment. A new Health Technologies Center will be open for use in the fall quarter of 1991, and a new student services/classroom/lab facility is under construction to be opened in mid-1992. These new buildings will provide FTCC with some of the most modern facilities in the community college system.

Should you make the decision to enroll at Forsyth Technical Community College, I welcome you to our family and hope you will be successful in fulfilling your educational goals. I hope your experiences are enjoyable and contribute success and happiness now and in the future. I urge you to take full advantage of the best educational bargain in North Carolina here at this college.

Please feel free to contact any member of the administration, faculty, staff, or me if you need assistance.

I look forward to seeing you on our campus!

Bob H. Greene, Ed.D., President

TABLE OF CONTENTS

Academic Calendar	4-5
History	6
Purpose	7
Equal Opportunity Affirmative Action	8-9
Programs of Study	10-11
Admissions	12-15
Tuition and Fees	16-18
Academics	19-32
Student Code of Conduct and Responsibilities	33-40
Services for Students	41-46
Student Clubs and Organizations	47-49
Student Financial Services	50-58
Adult Continuing Education	59-73
Associate in Applied Science Degree Programs	74-123
College Transfer Programs	124-127
Pretechnical Program	128-129
Vocational Diploma Programs	130-163
Certificate Programs	164-178
Course Descriptions	179-286
Faculty / Staff Directory	287-307
Maps	308-311

ACADEMIC CALENDAR

1991-1992

FALL QUARTER, 1991

Tuesday, September 3 and Wednesday, September 4 Registration
Friday, September 6 First Day of Classes
Monday, September 9 Last Day to Add Classes
Tuesday, October 1 Last Day to Drop Without Penalty
Thursday, November 21 Last Day of Classes
Friday, November 22 Grade Posting

WINTER QUARTER, 1991

Tuesday, November 26 Registration
Thursday, November 28 and Friday, November 29 Thanksgiving (Holidays)
Monday, December 2 First Day of Classes
Tuesday, December 3 Last Day to Add Classes
Monday, December 23 through
 Wednesday, January 1 Christmas and New Year (Holidays)
Thursday, January 2 Classes resume
Monday, January 6 Last Day to Drop Without Penalty
Monday, January 20 Martin Luther King's Birthday (Holiday)
Thursday, February 27 Last Day of Classes
Friday, February 28 Grade Posting
Friday, February 28 and Monday, March 2 Faculty Work Days -
 These days may be used to make up time lost due to inclement weather.

SPRING QUARTER, 1992

Wednesday, March 4 Registration
Thursday, March 5 First Day of Classes
Friday, March 6 Last Day to Add Classes
Monday, March 30 Last Day to Drop Without Penalty
Friday, April 17 Easter (Holiday)
Thursday, May 21 Last Day of Classes
Friday, May 22 Grade Posting
Monday, May 25 Memorial Day (Holiday)
Tuesday, May 26 Graduation

SUMMER QUARTER, 1992

Thursday, May 28 Registration
Friday, May 29 First Day of Classes
Monday, June 1 Last Day to Add Classes
Tuesday, June 23 Last Day to Drop Without Penalty
Friday, July 3 Independence Day (Holiday)
Friday, August 7 Last Day of Classes
Monday, August 10 Grade Posting
Thursday, August 13 Graduation

ACADEMIC CALENDAR

1992-1993

FALL QUARTER, 1992

Tuesday, September 1 and Wednesday, September 2	Registration
Friday, September 4	First Day of Classes
Monday, September 7	Labor Day (Holiday)
Thursday, September 10	Last Day to Add Classes
Wednesday, September 30	Last Day to Drop Without Penalty
Friday, November 20	Last Day of Classes
Monday, November 23	Grade Posting

WINTER QUARTER, 1992

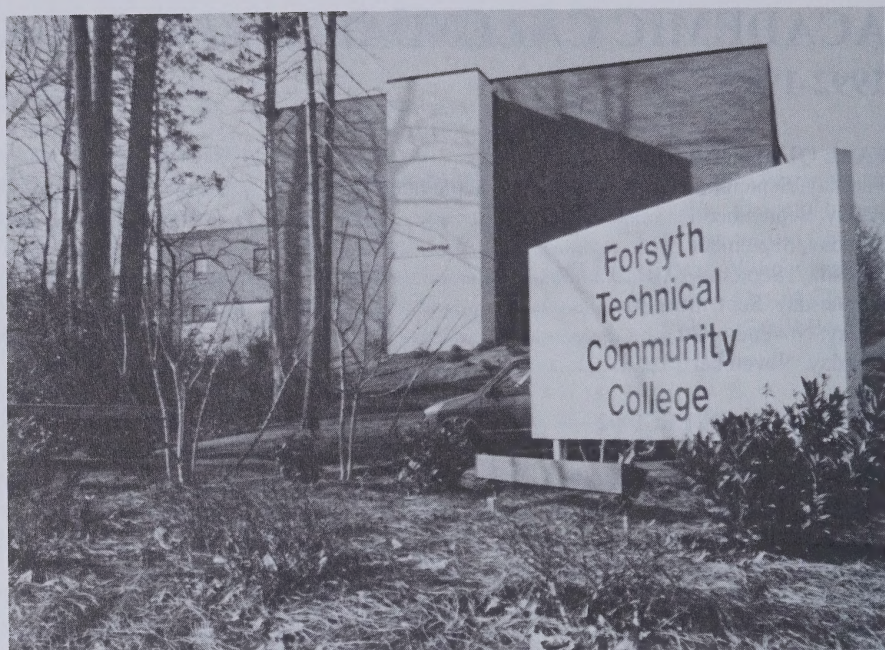
Tuesday, November 24	Registration
Thursday, November 26 and Friday, November 27	Thanksgiving (Holidays)
Monday, November 30	First Day of Classes
Thursday, December 3	Last Day to Add Classes
Wednesday, December 23	Last Day to Drop Without Penalty
Thursday, December 24 through Friday, January 1	Christmas and New Year (Holidays)
Monday, January 4	Classes resume
Monday, January 18	Martin Luther King's Birthday (Holiday)
Wednesday, February 24	Last Day of Classes
Thursday, February 25	Grade Posting
Thursday, February 25 through Monday, March 1	Faculty Work Days - These days may be used to make up time lost due to inclement weather.

SPRING QUARTER, 1993

Tuesday, March 2	Registration
Thursday, March 4	First Day of Classes
Tuesday, March 9	Last Day to Add Classes
Monday, March 29	Last Day to Drop Without Penalty
Friday, April 9	Easter (Holiday)
Thursday, May 20	Last Day of Classes
Friday, May 21	Grade Posting
Tuesday, May 25	Graduation

SUMMER QUARTER, 1993

Wednesday, May 26	Registration
Friday, May 28	First Day of Classes
Monday, May 31	Memorial Day (Holiday)
Thursday, June 3	Last Day to Add Classes
Wednesday, June 23	Last Day to Drop Without Penalty
Monday, July 5	Independence Day (Holiday)
Monday, August 9	Last Day of Classes
Tuesday, August 10	Grade Posting
Thursday, August 12	Graduation



HISTORY

Forsyth Technical Community College can trace its beginning to early adult and high school vocational courses which were available in Winston-Salem. In 1958 a Chamber of Commerce study recommended that an industrial education center be built to provide the trade and technical training needed by local industry. A bond issue provided the money to start construction of two buildings late in 1959 and the first adult classes were begun in October of 1960. In 1963 a third building was constructed, and new technical programs were added. That same year, the North Carolina Legislature passed the Community College Act, creating a statewide system of community colleges, technical institutes, and industrial educational centers. In January 1964 the name of the school was changed to Forsyth Technical Institute. The operation of the school was transferred from the Winston-Salem/Forsyth County Schools to a local board of trustees to govern the Institute following policies established by the State Board of Education and the State Department of Community Colleges.

Additional building construction throughout the years has allowed for program development and expansion to meet the increasing need for vocational and technical training. In 1984 a bond referendum provided funds for the acquisition of Dalton Junior High School, which became the Institute's West Campus, and for the construction of a high technology building, Hauser Hall. In July 1985 Forsyth Technical Institute became Forsyth Technical College. In December 1987 Forsyth Technical College became Forsyth Technical Community College.



PURPOSE

Forsyth Technical Community College is an open-door institution which offers adults the opportunities for learning that leads to gainful employment and effective community membership.

FTCC is dedicated to providing these opportunities through education and training in college transfer, vocational/technical, and continuing education areas.

The purpose of FTCC is to provide:

- effective teaching and academic support services for adults.
- opportunities for adults who need to master basic education skills.
- vocational education and training for adults who are preparing to enter skilled trades.
- technical education and training for adults wishing to enter occupations in business, industry, and health services.
- technical, vocational, and self-improvement courses for adults.
- education for adults who wish to further their schooling at four-year institutions.
- employee training and retraining for business and industry in response to changing economic conditions.

EQUAL OPPORTUNITY/ AFFIRMATIVE ACTION

DISCRIMINATION

Forsyth Technical Community College is an equal opportunity institution, in compliance and agreement with the provisions set forth in Title VI of the Civil Rights Act of 1964, Title IX of the Educational Amendments of 1972, and Section 504 of the Rehabilitation Act of 1973. No person shall be discriminated against on the basis of race, sex, religion, age, sexual orientation/preference, national origin, or handicap, if otherwise qualified.

Applicants, employees, and students of FTCC may lodge grievances involving alleged violations of their rights under these provisions with the Equal Opportunity/Affirmative Action Officer at (919) 343-4261 or the Assistant Secretary, Office for Civil Rights, 330 C. Street S.W., Washington, D.C. 20202. Inquiries may be directed to the equal opportunity affirmative action officer on employment and the dean of student services on admission at FTCC.

AUXILIARY AIDS FOR HANDICAPPED STUDENTS

As required by law, no student with impaired sensory, manual or speaking skills will be denied the benefits of, excluded from participation in, or otherwise subjected to discrimination under any education program or activity operated by Forsyth Technical Community College because of the absence of educational auxiliary aids. Auxiliary aids include interpreters or other effective methods of making orally delivered materials available to students with hearing impairments, taped texts, readers and libraries for students with visual impairments, and other similar services and actions. FTCC will make every effort to provide auxiliary aids to students who require such assistance. However, FTCC is not required to and will not provide attendants, individually prescribed devices, readers for personal use or study, or other devices or services of a personal nature.

The disabled student has the responsibility to notify the counselor for special populations of the need for educational auxiliary aids such as interpreters. The disabled student is required to notify the counselor as soon as the student begins to seek application or registration since ample time is necessary to assist the student by locating appropriate aids. The disabled student can contact the counselor for special populations at 723-0371, ext. 242. Deaf students may relay a written or verbal message and the counselor will return the call by TDD.

LOCAL ADVISORY COMMITTEES

Each curriculum has its own advisory committee. The committees are composed of representatives of local businesses, industries, and education and community organizations.

The advisory committees provide the necessary contact between FTCC and the community in an effort to maintain current and relevant programs of instruction to meet the need of the community.

LOCATION AND FACILITIES

The main campus is located at 2100 Silas Creek Parkway in the southwest section of Winston-Salem. The west campus is located at 1300 Bolton Street at the intersection of Bolton Street and Silas Creek Parkway. The health technology curriculums are housed in the Allied Health Building at North Carolina Baptist Hospital and in Bob H. Greene Hall on the main campus. All campuses are easily accessible from US Highway 52, North Carolina Highway 150, and Interstate Highway 40.

An off-campus Individualized Learning Center is located at the Whitaker Care Center of Forsyth Memorial Hospital. ILC's are also available on main campus and west campus.

HOURS OF INSTRUCTION

Classes are scheduled between the hours of 7 a.m. and 11 p.m., Monday through Friday. Some courses are offered on Saturdays.

Students in health technology curriculums (particularly nursing curriculums) can expect clinical practice to be scheduled during any part of the 24-hour day, seven days a week.

ACCREDITATION

Forsyth Technical Community College is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools to award the associate degree.

The Associate Degree Nursing curriculum and the Practical Nurse Education curriculum are accredited by the North Carolina State Board of Nursing. Respiratory Care Technology, Radiologic Technology, Nuclear Medicine Technology, and Radiation Therapy Technology are accredited by the American Medical Association (AMA) through the Committee on Allied Health Education and Accreditation (CAHEA). Medical Sonography is in the process of accreditation with the AMA and CAHEA.

FTCC is a member in good standing of the American Association of Community and Junior Colleges.

Electronics Engineering Technology, Manufacturing Engineering Technology, and Mechanical Drafting and Design Technology are accredited by the Technology Accreditation Commission of the Accreditation Board for Engineering and Technology (TAC/ABET).

REGIONAL AUTOMOTIVE TRAINING CENTER

Forsyth Technical Community College was chosen to be a technical service training center for the Ford Motor Company in 1984. This center is one of only five college-based centers in the United States. This program provides the latest training primarily for Ford technicians on a continuous basis, using Ford Motor Company's supplies, special tools, equipment, and technical materials. The Automotive Mechanics curriculum benefits through the use of the items provided by Ford Motor Company to keep the training consistent with new and advancing technology in the automotive field.

PROGRAMS OF STUDY

ASSOCIATE IN APPLIED SCIENCE DEGREE

Accounting
Administrative Office Technology
Architectural Technology
Associate Degree Nursing
Automation/Robotics Technology*
Banking and Finance
Business Administration
Business Computer Programming
Computer Engineering Technology
Early Childhood Associate
Electronics Engineering Technology
Horticulture Technology
Law Enforcement Technology
Manufacturing Engineering Technology
Marketing and Retailing
Medical Sonography
Mechanical Drafting and Design Technology
Nuclear Medicine Technology
Paralegal Technology
Radiation Therapy Technology
Radiologic Technology
Real Estate
Respiratory Care Technology

COLLEGE TRANSFER

Associate in Arts
Associate in Science

VOCATIONAL DIPLOMA

Air Conditioning, Heating, and Refrigeration
Automotive Body Repair
Automotive Mechanics
Carpentry and Cabinetmaking
Diesel Vehicle Maintenance
Electrical Installation and Maintenance
Electronic Servicing
Graphic Arts - Printing
Machinist
Plumbing and Pipefitting
Practical Nurse Education
Welding

*Pending approval of State Board of North Carolina Community College System, June 1991

ADVANCED DIPLOMA

Electronic Servicing
Welding

CERTIFICATE

Clerical Processing
COBOL Programming
Diesel Vehicle Maintenance
Funeral Director
Masonry
Medical Transcription
Microcomputing
Real Estate Appraisal

Some programs of study may be available both day and evening. For specific information, contact the Admissions Office.

ADULT CONTINUING EDUCATION

Occupational Extension Programs
Management Development Training Program
Vocational Technical Extension Programs
New and Expanding Industry Training Programs
Health Related Training Programs
Community Service Programs
Academic Program
Literacy Education Programs
Adult High School Diploma Program
Adult Basic Education Program
Compensatory Education Program
General Educational Development Program (GED)
Small Business Education Center
Special Seminars and Workshops

ADMISSIONS

ADMISSION REQUIREMENTS

Forsyth Technical Community College is an Equal Opportunity Institution and operates under an “open door” admissions policy. Admission to FTCC does not, however, imply immediate admission to the program desired by the applicant. Before a prospective student is admitted to a specific curriculum, placement tests will be scheduled and counseling interviews may be arranged. This process helps the students to evaluate their potential for success in their chosen field. When an evaluation of test scores and other evidence indicates a lack of readiness to enter a specific program, the applicants may be approved to the Pretechnical program or may be encouraged to reexamine their educational and occupational goals.

FTCC will accept credit from other technical institutes and colleges. For specific information refer to “Transfer Student.”

Admission to Associate Degree Programs

High school graduation, or the equivalent, is required of all applicants for degree programs. The high school equivalency certificate or the state adult high school diploma is acceptable in lieu of a regular high school diploma.

Applicants for the associate degree programs who are not high school graduates may arrange to complete high school in the Continuing Education Adult High School Program or take the high school equivalency examination (GED).

Applicants for admission to the Mechanical Drafting and Design Technology and Manufacturing Engineering Technology programs must present one unit of algebra and one unit of geometry. Business Computer Programming, Architectural Technology, Electronics Engineering Technology, and Automation/Robotics Technology applicants must present one unit of algebra. Applicants for admission to the Computer Engineering Technology program must present three units of mathematics beginning with Algebra I and one half unit of typing. Applicants for admission to associate degree health programs must present one unit in algebra, one unit in biology, and one unit in chemistry. Applicants to the Associate Degree Nursing program must have completed the unit of chemistry within a five-year period. High school physics is recommended for the engineering technology and health technology curricula. Applicants for admission to College Transfer Associate in Arts and Associate in Science programs must present two units of algebra. Associate in Science applicants must present one unit of geometry.

Applicants for associate degree programs should submit scores on either the Scholastic Aptitude Test (SAT) or the Assessment and Placement Test (APT). Information concerning the SAT may be obtained from local high school counselors or the Career Guidance Center in Student Services. Information on and registration for the APT are available from the Admissions Office.

Applicants for programs may be subject to approval by FTCC Admissions Review Committee for that program (particularly in the health technology programs). The members of the Admissions Review Committee come from instructional and

administrative staff of the curricula and the Student Services staff. The purpose of the committee is to evaluate all available data concerning each applicant. A majority of the committee must concur that applicants meet minimum criteria before they are admitted. Applicants for those programs in which the enrollment quota is filled before all applications are received will be informed that they may reapply for the next enrollment cycle. Some programs have more than a once-a-year enrollment cycle.

It should be noted that certain health technology programs have to admit applicants under state statutes of the licensure agencies. The North Carolina Board of Nursing has state statutes that identify reasons for prohibiting licensure for Associate Degree Nursing and Practical Nurse Education graduates. The reasons are presented during the admission process.

All students in Nuclear Medicine Technology, Radiologic Technology, and Radiation Therapy Technology come under the radiation exposure regulations of the state and federal governments (Radiation Safety Hazard Regulation). Any student who receives exposure in excess of permissible limits as defined by the regulations will be advised of the possible harmful effects and may be dropped from the curriculum. The regulations pertaining to students below the age of 18 are more stringent than those for the older student.

Admission to Diploma Programs

Applicants for one-year diploma programs must be high school graduates or meet North Carolina equivalency certificate (GED) standards. For non-high school graduates with special needs, however, exceptions may be made under certain circumstances in any program except Practical Nurse Education.

Applicants who are not high school graduates may arrange to complete high school in the Continuing Education Adult High School program or take the high school equivalency examinations (GED) offered at the West Campus. Applicants may be admitted into some programs on the basis of high school records; however, scores on the SAT or the APT may be required. Questions concerning the need for testing should be directed to the Admissions Office.

Because of the specialized nature of some of the programs, one unit of high school algebra is recommended for Air Conditioning, Heating, and Refrigeration; Electrical Installation and Maintenance; Electronic Servicing; Machinist; and Practical Nurse Education. High school geometry is also recommended for Machinist. Biology is recommended before entering Practical Nurse Education. Algebra I and biology are required for entry into Respiratory Care Technology.

Admissions to the Practical Nurse Education program and Respiratory Care Technology program may also be subject to approval by the Health Admission Review Committee.

Admission to Continuing Education and Extension Programs

Persons enrolling must be 18 years old or older. Further information concerning admission and registration procedures may be obtained from the office of the dean of continuing education.

ADMISSIONS PROCEDURES

An applicant for admission to any degree or diploma program should:

1. Obtain an application form from the Admissions Office or from a high school counselor.
2. Submit the properly completed application to the Admissions Office.
3. Arrange to take the Assessment and Placement Test (APT) through the Admissions Office. Scholastic Aptitude Test (SAT) scores may be substituted for the APT.
4. Request that a transcript of all high school and post high school academic work be sent directly to the Admissions Office.
5. Submit recommendations if requested.
6. Report for an interview, if requested, on the date scheduled by the Admissions Office. At this interview, test scores and previous academic records will be evaluated and the applicant will be advised as to eligibility for admission to the desired program. If an interview is not necessary, students will be notified of their status in writing.
7. Submit a properly completed health appraisal form when requested.
8. Participate in an orientation program as a condition of approval for every student admitted to FTCC.

Students who are currently enrolled and wish to be considered for another curriculum must update an application in the Admissions Office.

SPECIAL INFORMATION FOR FOREIGN STUDENTS

Forsyth Technical Community College does not issue the I-20 Form required by the United States. FTCC will be glad to help interested students in gaining information about colleges and universities that do offer the I-20 Form. Foreign students under other types of visas are considered for admission through normal admissions procedures.

Applicants graduating from high schools outside the United States must produce a transcript and must demonstrate high school proficiency through satisfactory scores on either the GED or the APT. Applicants graduating from colleges and universities outside the United States are required to submit a translated transcript and may be required by an admissions counselor to take the APT .

RESIDENCY FOR TUITION PURPOSES

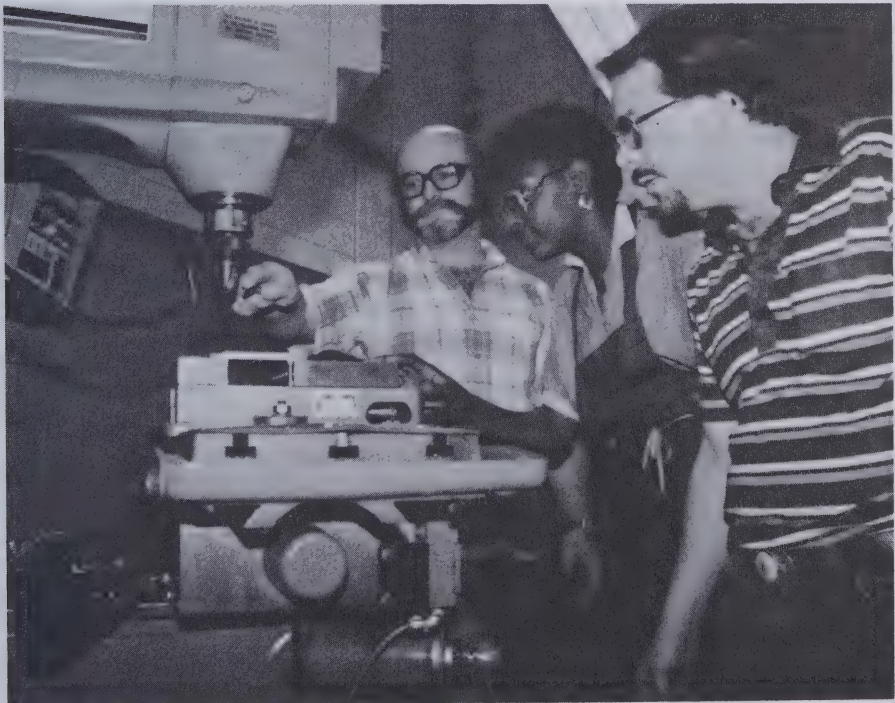
Under North Carolina law, each person must be classified as a resident or nonresident for tuition purposes. North Carolina law (G.S. 116-143.1) requires that to qualify as an in-state student for tuition purposes, a person must have established legal residence (domicile) in North Carolina and maintained that legal residence for at least 12 months immediately prior to classification as a North Carolina resident. All applicants for admission are required to make a statement as to their length of residence in the state.

To be eligible for classification as a resident for tuition purposes, applicants must

establish that their position in the state currently is, and during the requisite 12-month qualifying period was, for purposes of maintaining a bona fide domicile rather than of maintaining a mere temporary residence or abode incident to enrollment in an institution of higher education. The burden of establishing facts which justify classification of a student as a resident entitled to in-state tuition rates is on the applicant for such classification.

Residency for tuition purposes is initially determined by an admissions counselor during the approval of each applicant for admission to FTCC. The residency determination is stated to the students in their admission approval letter. A student who is deemed to be out of state for tuition purposes has the right to complete the Residence and Tuition Status Application for further consideration and appeal. This form, with a written request for appeal, is submitted to the director of admissions who reviews the initial determination and renders a decision within two weeks based on the additional information. The applicant may be requested to provide additional information before the decision is made. Students still dissatisfied with the residency decision made at this level may appeal in writing to the dean of student services. The dean of student services will review all information submitted by the applicant and may ask for additional information for clarity. The student's entire file will be reviewed. A decision will be made within two weeks and the student will be informed in writing.

Questions regarding residency status should be directed to the Admissions Office.



TUITION AND FEES

GENERAL TUITION AND FEES

Forsyth Technical Community College receives funds from local, state, and federal sources. Tuition charges are set by the State Board of Community Colleges and are subject to change without notice.

In-State Tuition:

12 quarter hours or more	\$105.00 per quarter
Less than 12 quarter hours	\$8.75 per quarter hour

Out-of-State Tuition

12 quarter hours or more	\$981.00 per quarter
Less than 12 quarter hours	\$81.75 per quarter hour

Late registration fee \$5.00

No tuition is charged for noncredit classes in the Continuing Education Division. However, a registration fee of \$25.00 may be charged. No tuition or fee is charged for Adult Basic Education courses. Normal tuition rates will apply if courses are taken in the ILC for curriculum credit. No tuition is charged for individuals aged 65 and over. Supply fees of \$10.00 or \$5.00 are set to meet instructional needs in certain types of courses.

STUDENT ACTIVITY FEE

It is the policy of FTCC that a student activity fee be charged. The activity fee for curriculum students will be collected during each quarter's registration according to the following schedule:

12 or more credit hours	\$5.00
6 to 11 credit hours	\$4.00
less than 6 credit hours	\$1.00

Students become members of FTCC's Student Government Association when they pay the student activity fee. The term "activity fee" may be misleading because the fee is used for more than just providing activities. Below is a list of expenses covered by the student activity fee.

1. **Graduation expenses** are partially covered. It costs over \$25.00 per student to hold a graduation ceremony. Currently, students pay a graduation fee of \$10.00 for each diploma received.
2. **TECHNICALLY SPEAKING** is a student newspaper published quarterly.
3. **Student activities and entertainment** such as cookouts, Christmas dances, and end-of-the-year spring flings are free to students.

4. **Athletic involvement** is provided for students by participation in Winston-Salem city league sports such as basketball and softball. Sporting equipment as well as registration fees are paid for out of the student activity fee budget.
5. **All Student Government Association expenses** are paid for out of student activity fee funds. Expenses include a portion of the student activities facilitator's salary, supplies and materials for use in the SGA Office, and all SGA printing expenses.
6. **Attendance at SGA conferences** is a major expense of the SGA. FTCC is a member of the North Carolina Comprehensive Community College (N4C) Student Government Association. The N4CSGA offers three conferences each year. These conferences offer workshops and seminars to better prepare students to lead the SGA's on their campuses.

For more details about the budget or to become involved in any of the activities listed above, contact the student activities facilitator in Snyder Hall.

BOOKS AND SUPPLIES

Textbooks and supplies are not furnished by FTCC but are the responsibility of the student and may be purchased at the bookstore. The cost of books and supplies varies from curriculum to curriculum and from quarter to quarter.

UNIFORMS

Uniforms and other special wearing apparel shall be paid for by the student. The initial cost of uniforms and special equipment in the various health curriculums is estimated at \$300.00. Students should inquire for details in the Admissions Office.

OTHER FEES

No laboratory breakage, or property damage fees will be charged to students. However, in case of breakage or damage due to gross negligence or maliciousness, a student will be expected to reimburse FTCC. Academic credit and official transcripts may be withheld until proper payment is made.

GRADUATION FEE

A \$10.00 graduation fee will be charged to the student for each degree, diploma, and/or certificate that the student applies for. A \$10.00 graduation fee will also be charged to the Adult High School graduates.

PARKING

Visitors are welcome on the campus of Forsyth Technical Community College. Designated visitor parking areas will be indicated by campus signs. Any visitor receiving a ticket should return it to the person or office visited.

Students planning to park on campus are required to purchase a \$5.00 parking decal at the time of registration. Specific rules governing parking will be issued upon vehicle registration and may be found in the current issue of the Student Handbook.

LIABILITY INSURANCE FOR HEALTH STUDENTS

All health students must purchase liability insurance before they will be permitted to engage in their lab or clinical practice. The current cost of the insurance is \$14.00 for each fiscal year and must be purchased by all health students at the beginning of the fall quarter. Health students who enter or reenter at a quarter other than the fall quarter will pay a prorated cost of the insurance for that year. Radiation Therapy Technology students will be required to pay a higher insurance rate depending on the insurance carrier.

TUITION REFUNDS/HOLDS

Tuition is not refundable. Exception will be considered where the cause of withdrawal is completely beyond the student's control, such as serious illness, death in family, and job transfer. In such cases, two-thirds of the tuition paid may be refunded only if the student withdraws and submits a request within ten calendar days after the first day of classes. Students will receive a full refund when FTCC is at fault in causing the withdrawal/drop. Students passing proficiency examinations for courses they have registered and paid for are not eligible for a tuition refund or hold. Refunds of five dollars or less will not be made except for classes cancelled by FTCC.

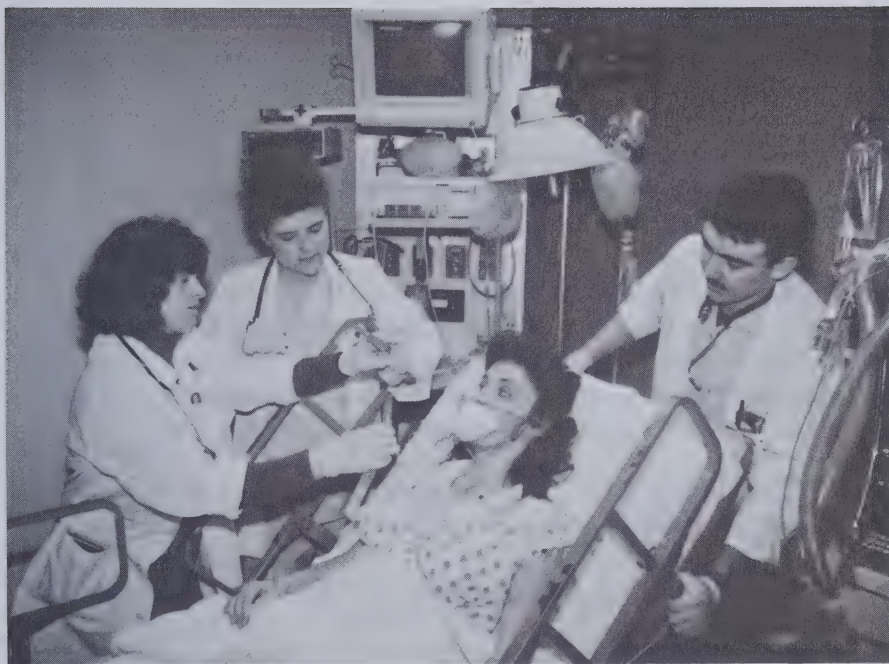
A student may request a tuition hold when he withdraws from a course or courses. The tuition hold is also only considered when the cause is completely beyond the student's control. A tuition hold may be requested at any point during the quarter in which the student is withdrawing. Statements from employers or doctors will be required before requests for refunds or holds are processed. Students failing courses in which they request a tuition hold may be subject to denial of the request. A tuition hold may not be converted to a tuition refund or a tuition refund to a hold after review by the dean of student services and processing by the Business Office. If a tuition hold is granted, the tuition will be credited to the student's account and must be applied toward tuition costs during any one of the following four quarters. If the student fails to use the tuition hold in the specified time period, the funds are forfeited. Fees other than tuition cannot be refunded or held for later quarters.

All requests are carefully reviewed and reasons for request must be stated clearly.

STUDENT FINANCIAL RESPONSIBILITY

The Business Office recommends the use of cash, certified checks, or cashier's checks. Personal checks will be accepted only with a numbered ID that has a picture of the student (usually a valid driver's license). Third-party, out-of-country, out-of-state, and business checks will not be accepted.

Personal checks may be written to pay for tuition and fees. However, if the check is returned for any reason, there will be a service charge of \$15.00 for each check written. Any student who does not have money for tuition and fees or does not have on file in the Business Office a written authorization from a sponsoring agency will not be allowed to register.



ACADEMICS

ORIENTATION AND REGISTRATION FOR NEW STUDENTS

All new students are required to participate in an orientation and registration session conducted by the counseling staff and faculty. The purpose of this session is to register the students and to acquaint them with personnel, faculty, and student organizations. The regulations, policies, and privileges of Forsyth Technical Community College as set forth in the General Catalog and Student Handbook are discussed and interpreted. Specifics are presented on departmental rules and schedules for individual curriculums that entering students are required to be familiar with while enrolled.

REGISTRATION FOR CONTINUING STUDENTS

Students must register and pay fees by the beginning of each quarter. The registration and prepayment dates for continuing students are posted during the latter part of each quarter. All continuing students are required to meet with their advisor to determine a schedule of courses for the upcoming quarter. Any questions arising during this registration period concerning transfer credit for a course(s) should be directed to the appropriate admissions counselor. Tuition and fees must be paid on designated prepayment or registration days or students will have their registration voided.

DROP/ADD AND SCHEDULE ADJUSTMENT

A student may drop and add classes during the drop/add period. Schedule adjustment may be allowed if:

1. a class is not cancelled or closed;
2. students have the consent of their advisor and have met admission requirements and prerequisites.

COURSE NUMBERING SYSTEM

Courses are numbered in accordance with the system approved by the North Carolina Department of Community Colleges. Each course is designated by a three-letter prefix indicating the general subject area. A number indicating a specific course within an area follows the letter prefix according to the following rules:

- | | |
|--|-----------|
| 1. Pretechnical courses | 0001-0099 |
| 2. College Transfer and technical courses | 0100-0299 |
| 3. Vocational courses | 1000-1099 |
| 4. Continuing education courses beyond high school | 2000-3099 |

GRADING SYSTEM

The following grading system is generally used by Forsyth Technical Community College:

Number Grade	Letter Equivalent	Quality Points	
		Description	Per Quarter Hour
94-100	A	Excellent	4
86-93	B	Good	3
78-85	C	Fair	2
70-77	D	Passing	1
Below 70	F	Failing	0
Withdrawal	W		
Passing	WP		
Failing	WF		
Incomplete	I		
Audit	Y		
Never attended	NA		

The letter equivalent system is used for recording and reporting grades.

W - Withdrawal - A withdrawal is the grade given to a student who officially withdraws from a course through the 18th class day of a quarter.

WP - Withdrawal Passing - A withdrawal passing is the grade given to a student who at any time after the 18th class day of the quarter withdraws from a course with a passing grade.

WF - Withdrawal Failing - A withdrawal failing is the grade given a student who at any time after the 18th class day of the quarter withdraws from a course with a failing grade. A WF is computed in the grade point average equivalent to a grade of F.

Withdrawals (WP, WF) - A student may not withdraw from a class after the 50th class day of the quarter without permission of the instructor.

HOW TO WITHDRAW OFFICIALLY

Every student who is considering withdrawing from a class or from school should contact the instructor or Counseling Center to discuss the decision to withdraw. When the student initiates a drop, the date the student completes the Drop Form is considered the official withdrawal date by the Records Office. When the instructor initiates a drop, the date the instructor records on the Drop Form is the official withdrawal date.

Withdrawal from a Class - It is the student's responsibility to notify the instructor or Counseling Center in person of the decision to withdraw and to complete a Drop Form.

Total Withdrawal from School - A student who must withdraw from school before graduation, either permanently or temporarily, should withdraw officially. Students must notify their instructors or the Counseling Center in person and complete a Drop Form and the End-Of-Quarter Withdrawal Notice. This information is necessary to assure that the student's status at the time of withdrawal is clearly identified in order to expedite reentry, transfer of credit to another institution, or to provide potential employers with accurate education information. Veterans and financial aid recipients must notify the Office of Student Financial Services. When students fail to notify the Counseling Center, they may receive a failing grade from their instructor.

As stated in the attendance policy, no passing grade will be issued for a course(s) if, for whatever reason, a student has been absent 25% of the total officially scheduled class time. Under these circumstances, it is the responsibility of the instructor to initiate the Drop Form as soon as possible and submit it to the Records Office.

I - Incomplete - The grade of Incomplete is given only if a student has a valid reason for failure to complete the work on schedule. Illness, absence on company business, or circumstances beyond the student's control are considered valid reasons for noncompletion of work. The student must have advised the instructor of the circumstance before the end of the quarter and have been granted an Incomplete grade. The instructor must have specified the work to be made up in order to remove the Incomplete grade and a date within the following quarter by which the work must be completed. If the conditions necessary to remove the Incomplete grade will require additional hours of instruction, the student must reregister for the course. If, on the other hand, the student needs only to complete work without instructional supervision, this work must be completed no later than the following quarter or the course must be repeated.

Any student who receives an Incomplete grade on a course that is a

prerequisite for another course must make up the incomplete work by the end of the drop/add period if the student is registered for the next succeeding course. Should the student fail to remove the Incomplete grade by the end of the drop/add period, the student must drop the course which is dependent on the prerequisite.

If the Incomplete grade is not removed by the end of the quarter immediately following the quarter it was granted, it will remain permanently recorded.

Y - Audit - Students auditing courses are not required to take examinations or hand in written work but may do so if they wish. No grade or credit toward a diploma is given. An audit may not be changed to credit or credit changed to audit after the last day of the drop/add period. Normal attendance policies will apply. Students withdrawing during the quarter will be given the grade of W.

The Audit Request form is available in the Counseling Center or from the appropriate division dean. It must be submitted to the Records Office for processing before the end of the drop/add period.

ACADEMIC STANDING

To be in good academic standing, an entering student must have earned a grade point average of 2.0 by the end of the first quarter, and a cumulative grade point average (GPA) of 2.0 must be maintained thereafter.

Students who do not earn the required GPA in any quarter will be placed on academic probation for the following quarter.

Students will automatically be removed from probation when they earn the required cumulative GPA.

Students on academic probation who do not earn the required GPA in the next quarter may be required to register for a reduced load, or they may be required to withdraw from the curriculum. The student may be directed to a more suitable curriculum.

Students in some curriculums may have special grade progression policies. These policies will be given to the student at the beginning of course study. Students who do not meet the requirements of these policies will be dropped from the curriculum.

All students enrolled in FTCC are expected to be aware of their academic status at all times and to be responsible for knowing they have failed to meet the requirements for continuing in school. Instructors, faculty advisors, and counselors are available for conferences, but it is the responsibility of the student to seek extra help if it is needed.

At the end of each quarter, each departmental Academic Review Committee meets to review students' academic standing. If a student's standing is changed in any way, other than removal from probation, the student will be notified in writing by the respective division dean.

ACADEMIC APPEAL

When students wish to appeal the decision of the division Academic Review Committee, they must appeal in writing to the appropriate division dean within 24 hours after the date of receipt of grades.

The dean will convene the division Academic Appeals Committee which will hear the appeal and make a recommendation to the dean. The dean will make the final decision and notify the student, the department chairperson, and the advisor in writing.

COURSE REPEAT RULE

The last grade earned on a repeat course, whether F or higher, will be the grade computed for GPA. Withdrawal grades of W or WP will not be considered as repeat grades. A grade of WF will be considered as a repeat grade.

If students fail any course in their curriculum, they must repeat the course until a passing grade is received; otherwise, they cannot receive a diploma. Students are responsible for scheduling makeup courses required for graduation.

If students fail one of the courses in the major subject area, they may be referred to the Counseling Center for counseling.

GRADE REPORTS AND TRANSCRIPTS

Student grade reports are mailed to students' permanent addresses after the end of each quarter.

Transcripts of all course work attempted at FTCC are maintained in the Records Office. Requests for copies of a student's transcript should be made in writing to the Records Office. Transcripts will not be issued without the written authorization of the student. All transcripts will reflect the student's complete academic record. Partial or incomplete transcripts will not be issued. Official transcripts are issued to employers, educational institutions, etc. Transcripts issued to students are unofficial and indicate that they were issued to the student.

A \$2.00 fee is assessed for each copy of the transcript requested, whether official or unofficial. Transcripts are not issued unless tuition, fees, and other obligations due FTCC have been satisfied.

ADVISOR/ADVISEE PROGRAM

FTCC has an advisor/advisee program which is designed to provide a more personal atmosphere for the student and to increase communication between students and faculty. Each student is assigned a curriculum advisor. Through periodic conferences between the student and advisor, it is hoped that the student will be better able to choose an academic program from quarter to quarter and that potential problems can be solved.

Each advisor will post regular office hours so the student can arrange conferences to discuss or explore any problem or condition. The advisor will assist the student during registration. Students are not allowed to register without proper advising.

Each student is assured that all discussions are confidential. When necessary, the student may be referred to the Counseling Center.

ATTENDANCE

Students are expected to attend all class, laboratory, shop, practicum, and clinical experience sessions. Students have full responsibility for accounting to their instructors for any absence and should report to their instructors as soon as possible to determine if and when work may be made up.

Students are expected to report for class, laboratory, shop, practicum, and clinical experience on time. Habitual tardiness may, at the discretion of the instructor, be considered in computing attendance.

Students must satisfy the instructor that they should be permitted to remain in a course and attend classes after incurring absences in excess of the following:

1. three (3) hours of class;
2. two (2) practicum (shop, laboratory, or clinical experience) sessions which meet for two (2) or more hours;
3. two (2) hours of class and one (1) practicum (shop, laboratory, or clinical experience) session which meets for two (2) or more hours.

When students are absent from a class and a practicum (shop, laboratory, clinical experience) session which meet consecutively, each session missed will be counted as an absence.

Students will be informed in writing no later than the second class meeting when a course requires any special attendance rules different from those listed above. These special attendance rules must be on file in the office of the appropriate dean.

Class attendance is calculated from the first officially scheduled class meeting, which includes the drop/add period, through the last scheduled meeting.

No passing grade will be issued for a course if, for whatever reason, students have been absent 25 percent of the total possible class time per course per quarter.

CLINICAL EXPERIENCE IN HEALTH CURRICULUMS

1. Clinical hours in any of the health curriculums may be scheduled during any part of the 24-hour day, seven days a week.
2. Students will be informed in writing no later than the second class meeting when a clinical course requires any special attendance requirements.
3. In order to pass clinical courses, students must pass all critical requirements for the course.
4. Required uniforms must fit neatly in order for the student to meet the dress code of both FTCC and the clinical facilities.
5. There are certain areas (i.e., operation room obstetrics, isolation rooms) in the hospitals that require special hospital garments. Due to infection control, hospital policy requires that only those garments supplied by the hospital be used. Students who are unable to wear and be covered by these garments will not be allowed to go into that clinical area and this may jeopardize their ability to complete the curriculum.

6. Failure to meet any dress requirements may jeopardize the student's ability to continue in a curriculum.

STUDENT CLASSIFICATION

Full time:	A student who is enrolled in 12 or more quarter hours of course work.
Part time:	A student who is enrolled in fewer than 12 quarter hours of work.
Special:	A student who is enrolled in credit courses but who is not working toward a diploma. A special student must meet the regular admissions criteria (see Special Credit Policy.)
Audit:	A student who is enrolled in regular course work but who is not receiving credit for work undertaken.
Freshman:	Any student who has earned fewer than 45 credit hours.
Sophomore:	Any student who has earned 45 credit hours or more.

PRETECHNICAL PROGRAM

This program offers a series of courses for preparation, remediation, and academic guidance for students who, for a variety of reasons, do not meet the specific entrance requirements for a curriculum of their choice. Students whose academic records indicate that they may have difficulty in a curriculum of their choice may also be advised to take remedial course work in the Pretechnical Program.

The student's academic study program is individually designed to meet each student's specific needs. The program provides students with an opportunity to build academic skills and acquire the background which should facilitate success in their desired curriculum.

SPECIAL CREDIT POLICY

A special credit student is one who is taking one or more curriculum credit courses but who is not enrolled in a specific curriculum. Special credit students are permitted to register for some credit courses without having to be admitted as a regular curriculum student, provided that prerequisites have been met and that such registration does not preempt students enrolled in a degree, diploma, or certificate curriculum. Some credit courses will not be available to special credit students without prior instructional division approval.

For admission to FTCC, a special credit student needs to complete the student application and be a high school graduate. All special credit students are required to take the Assessment and Placement Test and furnish an official transcript, unless waived by the Admissions Office. Special credit students must submit an updated application and meet regular admission requirements if they desire to be approved or reclassified as a curriculum student. Satisfactory completion of courses as a special credit student does not guarantee admission to a curriculum.

When students reach 30 credit hours, they will be advised to seek admission into a curriculum, but there are no limitations on the number of credit hours earned by a

special credit student. All credit hours will be evaluated for application to curriculum admission when and if the special credit student applies.

Generally, students are approved for special credit status in the following circumstances:

1. The student desires to take some relevant credit courses prior to being able to start a specific curriculum. The student may desire to complete these courses before entering that curriculum in order to reduce course load once in the program to improve chances for success.
2. The student desires to take specific courses, but does not plan to pursue and complete a curriculum at FTCC.
3. The student has been denied admission into a specific curriculum that has already reached its quota at the time of application but who wishes to complete the related courses.

All policies, rules, and the Code of Conduct apply to special credit students. Special credit students are not eligible for any form of financial aid through FTCC.

Those students who are designated to be in the Pretechnical Program based on placement test scores are not eligible to be considered as special credit students.

READMISSIONS

Students who have withdrawn in good academic standing should contact the Admissions Office to update their application. If the application for readmission is for a different curriculum, standard admission requirements for new students will apply.

Students who have withdrawn while on academic probation or who have been suspended for academic deficiencies must reapply through the Admissions Office. Approval for readmission for the same curriculum or an alternate selection will be based on the applicant's ability and aptitude, the time elapsed since withdrawing, recommendations of the Academic Review Committee, and the applicant's career objectives. Students granted readmission may have course load restrictions, specific grade requirements, and/or required counseling sessions in order to remain enrolled in the curriculum. When good academic standing has been reestablished, the restriction(s) will be removed.

There are specific additional guidelines for reentry into any of the health curriculums. These guidelines may be obtained from the Admissions Office.

Former students who reapply for admission may be asked to supply the Admissions Office with transcripts and test scores.

Students who have been suspended for disciplinary reasons cannot be readmitted without submitting a request for approval from the dean of student services.

INDEPENDENT STUDY

Independent study provides an alternate means for a student to earn credit for certain required courses. It should be used only when it has been determined that it

would create an unreasonable hardship for the student to wait for the course to be available. Guidelines to be used are as follows:

1. To be considered for independent study, students must file a Request for Independent Study form with their advisor who will review the request and forward it with suggestions to the division dean for final action. The form should be completed during registration, and the student must register for the course during the registration period.
2. Acceptable reasons for allowing a student to take an independent study are (1) one-time course sequencing difficulties, (2) scheduling problems that were no fault of the student, and (3) needing the course for graduation at the end of the quarter.
3. Students will not be approved for independent study if their cumulative GPA is less than 2.0 or if they have failed or withdrawn failing from the course in question.
4. Students will not be allowed to take more than two courses as independent study during the entire time in a curriculum. Exceptions require special approval from the division dean.
5. All independent studies must be taught by a full-time instructor.

PROFICIENCY EXAMS

A student who has been approved for admission or a student already enrolled in a program of study may request to take a proficiency exam for a course for which a proficiency exam is available. It is not necessary for a student to be registered or enrolled in a course before requesting a proficiency exam. However, if the student is enrolled in a course for which a proficiency exam is requested, the request must be made by the tenth class day. A student who withdraws from a course after the tenth class day in any quarter and has not formally submitted a request cannot earn credit by proficiency exam for a period of one year. The academic advisor will certify that the student has not been enrolled in the course within the past year and that the prerequisites for the course have been satisfied. Some curriculums have restricted proficiency exams and the student must be admitted to that curriculum before a request will be considered. A student may take a proficiency exam for a given course only once in a twelve-month period. A Request for Proficiency Exam form must be completed and a \$10.00 nonrefundable charge is assessed for each proficiency exam. Guidelines on how to apply for a proficiency exam can be obtained from the office of the appropriate division dean and the Counseling Center. Tuition and fees are nonrefundable.

TRANSFER STUDENTS

Applicants who have attended other institutions of higher learning may transfer credits in courses comparable in content, objective, quality, and credit hours to those offered at FTCC. Direct transfer of credits may be granted if the student is transferring from an institution that is regionally accredited or is a member of the North Carolina Community College System. Provisional transfer credit may be granted if the student is transferring from an institution that is not regionally accredited or is not a member

of the North Carolina Community College System but is recognized by the Council on Post-Secondary Education (see Provisional Transfer Credit).

No grade lower than a C may be transferred from other institutions. Courses taken on pass/fail basis will be considered only after receiving information on requirements necessary to receive a pass grade. All final transcripts for transfer credit for questionable courses will be made by the director of admissions and career guidance after consultation with appropriate departmental chairpersons. A written evaluation will be sent to the student.

Credits transferred from other schools will be reflected on students' transcripts as hours earned and will not be used in the computation of grade point averages. When a student transfers between curriculums within FTCC, credits attempted, including grades, hours earned, and quality points will be forwarded to any curriculum where the courses are identical. A student's initial cumulative grade point average in a new curriculum will be computed from the credits forwarded to that curriculum. For courses that are not identical but comparable, credit will be granted in the same manner as courses transferred from another institution. Such courses will not be used in computing grade point average; only hours earned will be transferred.

Many courses with a technical or skill content have time limitations on the acceptance of transfer credit. This includes credits earned at other institutions and/or credits earned at FTCC. Generally, courses in this classification taken more than five years before entry into FTCC cannot be considered for transfer purposes. A complete list of these courses and the specific time limitations are maintained by the Admissions Office. In such instances, students may challenge out-of-date courses by proficiency examinations when appropriate and available.

Inquiries concerning transfer credits granted must be made to the admissions counselors during the student's first quarter of enrollment. If the student is not satisfied with the transfer credit as granted, requests should be made in writing to the director of admissions and career guidance who will confer with the appropriate divisional dean. After deliberation between the divisional dean and the director of admissions and career guidance, the student will be notified of the final decision on transfer credit to be granted.

PROVISIONAL TRANSFER CREDIT

Students transferring from an institution not regionally accredited but recognized by the Council on Post-Secondary Accreditation (COPA) may be granted provisional transfer credit under the guidelines and procedures as set forth by the Admissions Office and approved by the president.

1. Any applicant from institutions that are not regionally accredited or that are not members of the North Carolina Department of Community Colleges must meet all the requirements for admission as an entering student in the specific curriculum.
2. Upon receipt of an official final college transcript, credit will be determined according to FTCC curriculum guidelines, and the student will be notified of courses provisionally accepted toward graduation. Grades lower than a C will not be considered for transfer. Courses completed on a pass/fail basis

can be considered only upon receipt of information on requirements necessary to receive a passing grade.

3. Students must satisfactorily complete 24 quarter hours of credit academic work at FTCC before provisional transfer credit is officially accepted and recorded. The term “satisfactory” means the student has a minimum 2.0 cumulative grade point average in FTCC course work and meets any other academic requirements necessary to continue in the specific curriculum at FTCC.
4. It will be the responsibility of the student to request that provisional transfer credit be officially accepted after the minimum quarter-hours- in-residence have been met. The request should be made to the director of records and registration.
5. Between initial enrollment and acceptance of transfer credit, students must complete prerequisite courses at FTCC.

Note: In some technical or skill-level courses, proficiency examinations (when appropriate and available) may still be necessary to determine proper academic placement.

TRANSFER OR EARNED CREDIT BETWEEN FTCC CURRICULUMS

Credits earned in any FTCC two-year curriculum may be credited toward a diploma curriculum upon evaluation and acceptance by the director of admissions and career guidance. Credits earned in a diploma curriculum are not acceptable for transfer to an associate degree curriculum but may be credited toward a second diploma major.

TRANSFER TO SENIOR COLLEGES AND UNIVERSITIES

The College Transfer program is designed to provide a quality educational experience equivalent to the first two years of a liberal arts college curriculum. Students who have earned the degree of A.A. (Associate in Arts) or A.S. (Associate in Science) can transfer to most public or private senior institutions with full junior-year standing. A minimum G.P.A. of 2.0 is required for acceptable transfer credit.

The program enables the student to prepare for virtually any area of major interest. It covers six (6) quarters, and offers courses in mathematics, literature and grammar, humanities, physical education, and the social, physical, and life sciences. Counselors and advisors are available to assist students in planning acceptable programs for transfer to the desired college or university. The Career Guidance Center maintains copies of all College Transfer Agreements for student review.

Students who need to improve their academic skills or gain credit for courses not taken in high school can do so through pretechnical noncredit courses.

Technical level credit earned in the AAS degree programs at FTCC may be transferred to similar programs at other institutions. Acceptability of all technical transfer credit is determined by the institution to which the student wishes to transfer. Diploma credit is not transferable to senior institutions.

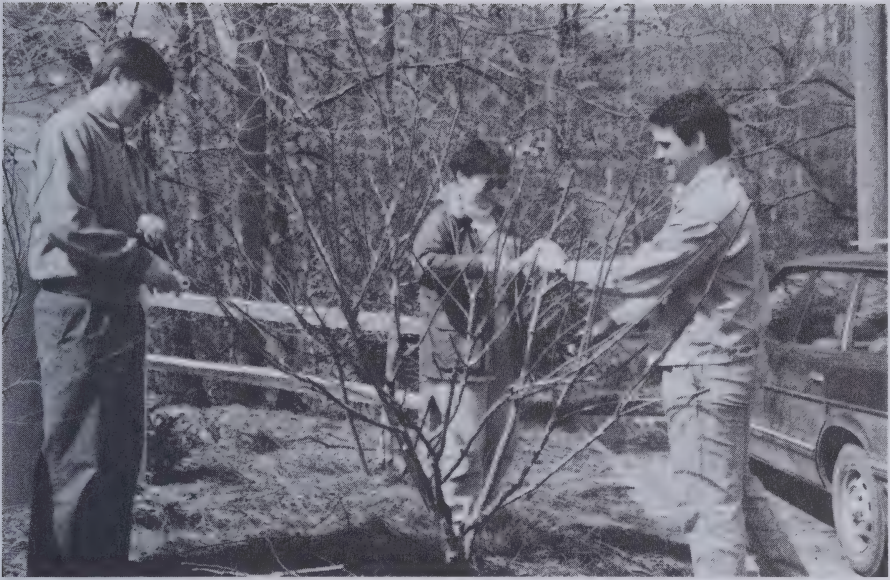


The Career Guidance Center also maintains a list of senior colleges and universities which currently accept some or all of the credit earned in a technical level (Associate in Applied Science) curriculum. However, it is the student's responsibility to contact the Admissions Office of the receiving institution for transfer information.

FAMILY EDUCATIONAL RIGHTS AND PRIVACY ACT OF 1974

The Family Educational Rights and Privacy Act of 1974 provides many safeguards regarding the confidentiality of and access to student records.

1. Students may review their educational records by making a written request to the Director of Records and Registration.
2. Student records will not be reviewed by third parties unless permission is obtained in writing from the student. Exceptions may be made for instructors and administrators if the information is for educational purposes. Exceptions may also be made for parents who claim the students as dependents and for credentialing, auditing, or accrediting organizations. The dean of student services will make the final decision concerning access to records.
3. Official transcripts will be issued only when a written request is received from the student. Transcripts from high schools or other colleges will not be released.
4. FTCC does not publish or distribute directory information or any personally identifiable information.
5. Authorities with court orders are permitted to review records in the presence of Student Services administrative staff.



GRADUATION REQUIREMENTS

A student wishing to receive a degree, diploma, or certificate from FTCC must fulfill all course requirements. All students must earn a cumulative grade point average of 2.0 and must have received a passing grade in all required courses to be eligible for graduation. A student who has earned a cumulative grade point average of 3.5 is eligible to graduate with high honors. A student who has earned a cumulative grade point average of 3.0 is eligible to graduate with honors.

Grade point average (GPA) is obtained by dividing the total quality points earned by the total number of credit hours work attempted.

A candidate for an associate degree must complete at least 32 quarter hours of credit work at FTCC, with a minimum of 16 quarter hours in the major area. A candidate for a diploma must complete at least 16 hours of credit work at FTCC, with a minimum of 8 quarter hours being in the major area courses. Credit hours required in residency may not be met by proficiency examination.

Course requirements vary according to program. Students should refer to the course requirements for their program of study to determine if all requirements have been met and should be aware at all times of their progress toward graduation.

Students graduate with the course requirements that are applicable at the time they enroll in a curriculum if they remain continuously enrolled until graduation. Students who withdraw for two or more quarters from a curriculum must graduate with the course requirements that are in effect at the time they re-enroll. Any exceptions to this must be approved by the appropriate division dean.

It is the responsibility of the student to complete the official Intent to Graduate form at least six weeks before the last registration. Intents filed within six weeks of graduation will not be accepted for that graduation but will be applicable for the next graduation. Intent to Graduate forms are available in the Records Office and the

Counseling Center. There is a \$10.00 graduation fee that must be paid at the time the Intent is filed.

COMMENCEMENT EXERCISES

Commencement exercises are held at the end of spring and summer quarters on the dates published in the academic calendar. Diplomas are awarded at this time. Students are expected to notify the Records Office as to their intention to participate in the exercises when they submit their Intent to Graduate form.

COMMENCEMENT MARSHALS

Marshals are selected from full-time rising sophomores who have maintained the highest scholastic averages during their freshman year. The two marshals who have the highest academic averages are named chief marshals.

SCHOOL RINGS AND PINS

Students in good standing who have completed at least one-half of the credit hours required for graduation in their curriculum may order a school ring. The student is required to pay a deposit at the time the ring is ordered with the balance due upon delivery.

Pins for health curriculums are also available. Orders for both pins and rings may be placed with the bookstore.

SEALED RECORDS

A student's records may be sealed from the student's review and closed for purposes of readmission and grade posting due to financial debt to the school or litigation involving the student and the school. Inquiries regarding sealed records should be directed to the dean of student services. Transcripts will not be issued as long as the file remains closed.

UNRESTRICTED ELECTIVES IN

A.A.S. DEGREE PROGRAMS

In addition to the required curriculum courses, each student will be required to complete an additional two (2) courses for a minimum of two (2) credit hours in order to receive the A.A.S. degree. These courses will be designated as unrestricted electives and must be chosen from disciplines outside the student's area of specialization.

STUDENT CODE OF CONDUCT AND RESPONSIBILITIES

CODE OF CONDUCT

The act of enrollment at Forsyth Technical Community College includes an acceptance by the student of the rules of FTCC. By enrolling, the student accepts the obligation to assist in making FTCC an effective place to conduct a learning process and to engage in the pursuit of truth, the development of self, and the improvement of society. Each enrolled student is considered to be a responsible adult, and FTCC assumes and requires that men and women of suitable age who enroll in the various programs will maintain standards of conduct appropriate to the status of students at FTCC.

FTCC has an inherent responsibility to maintain order on its campus. Therefore, students may or shall be suspended or dismissed for behavior deemed incompatible with the mission, the regulation, or the responsibility of FTCC, or deemed to be in violation of any of the provisions of the Code of Conduct as set forth herein.

FTCC recognizes the right of an enrolled student to receive a full opportunity to learn and develop, unfettered by any and all obstacles not conducive to a sound, fundamental educational program. To this end, FTCC recognizes, declares, and vests certain rights in each student enrolled at FTCC.

STUDENT RIGHTS

A. Legal Rights

All the rights and privileges guaranteed to every citizen by the Constitution of the United States and by the State of North Carolina shall not be denied any student. Further, FTCC shall adhere to all of the statutes of the United States and State of North Carolina. FTCC has recognized the Student Government Association as the approved agency to voice students' opinions and speak on institutional policies concerning students' activities.

B. Rights of the Learner

The instructor in the classroom and in conference shall encourage free discussion, inquiry, and expression. Student performance will be evaluated solely on an academic basis, not on opinions or conduct in matters unrelated to academic standards.

C. Student Records

The Family Educational Rights and Privacy Act of 1974 provides safeguards regarding the confidentiality of and access to students records, and this Act will be adhered to by FTCC.

1. Students may review their educational records by making a request in writing to the director of records and recruitment.

2. Ordinarily, student records will not be available for review by third parties unless permission is first obtained by such third parties in writing from the student or unless such review is pursuant to a valid court order or subpoena. Exceptions may also be made in the case of parents claiming the student as a dependent. The dean of student services, in his or her discretion, shall make the final decision concerning access to records by any persons other than the student.
3. Official transcripts will be issued only upon a written request by a student or upon written authorization by a student to be released to a designated entity.

D. Freedom of Association

Students are free to organize and join an association organized or existing to promote the student's curriculum or career interest. Student organizations must be approved by the Student Government Association before organization on the campus in order to insure FTCC's policies and procedures are followed and adhered to.

E. Due Process

Due process procedures are established to guarantee the right of hearing, a presentation of charges, evidence for charges, the right of confrontation by the questioning of witnesses, and the right to counsel by the accused student, if so requested by the student. Any student aggrieved by the violation of this Code of Conduct shall have the right of appeal to the Student Appeals Committee as hereinafter provided.

GENERAL CAMPUS RULES

The following is a general summary and classification of the major rules of student conduct, and any violation shall be considered a violation of this Code of Conduct. For purposes of FTCC rules and regulations, FTCC grounds are defined as any location owned, leased, rented, controlled, or otherwise occupied by FTCC or any division.

Rule 1. Disruption and Disorderly Conduct

A student shall not engage directly or aid and abet in disorderly conduct which is intended to provoke violent retaliation or cause a breach of peace or which disrupts, disturbs, or interferes with the normal routine activities or teaching of students, or which disrupts, disturbs, or interferes with the peace, order, or discipline on FTCC grounds.

Rule 2. Damage to or Destruction of FTCC Property

A student shall not intentionally, willfully or wantonly cause, or attempt to cause, substantial damage to be done to FTCC property, or shall not steal, or attempt to steal, FTCC property.

Rule 3. Damage to or Destruction of Private Property

A student shall not intentionally, willfully or wantonly cause, or attempt to cause, damage to private property of another, or shall not steal, or attempt to steal, private property of another when on FTCC grounds or while attending a FTCC activity, function, or event held off FTCC grounds.

Rule 4. Assault on or Verbal Abuse of FTCC Employee

A student shall not intentionally cause, or attempt to cause, physical injury, verbal abuse, harassment, or communicate a threat to a FTCC agent, servant, or employee at any time while such student is enrolled at FTCC.

Rule 5. Assault or Verbal Abuse of Persons Other Than Employees

A student shall not intentionally cause, or attempt to cause or threaten to cause, physical injury, verbal abuse, harassment, or communicate a threat, or direct any profane language toward any other student or FTCC guest, visitor, or invitee at any time while such student is enrolled at FTCC, or while such student is on FTCC grounds or is attending a FTCC activity, function, or event held off FTCC grounds.

Rule 6. Weapons and Dangerous Instrumentalities -

NC General Statute 14-269.2

It is unlawful for anyone to possess any weapon, whether openly or concealed, while on private school or public school property unless it is used as part of a school activity or ceremony. In essence, the statute refers to any and all property owned, used, or operated by any Board of Education, school, college, or university for the administration of any public or private educational institution. In practice, then, this statute permits prosecution of anyone carrying any dangerous instrument in school, on school grounds, or at any school activity.

Rule 7. Narcotics, Alcoholic Beverages, and Controlled Substances

A student shall not knowingly or negligently own, possess, use, transport or be at any time under the influence of any narcotic drug, alcoholic beverage or any other controlled substance (as controlled substance is defined by the North Carolina General Statutes) while on FTCC grounds or during the time when a student is participating in any FTCC activity, function, or event off FTCC grounds. Use of any drug authorized by medical prescription from a registered physician shall not be considered a violation of this rule. However, students shall be held strictly accountable for their behavior while under the influence of prescribed medicines.

Rule 8. Classroom and Campus Activities

A student shall comply with all directions of teachers, student teachers, substitute teachers, teacher's aides, FTCC administrators, or authorized personnel during any time when the student is under the authority of FTCC personnel. A student on campus shall promptly identify himself to a FTCC official or campus security officer at all times upon reasonable request. A student shall appear before FTCC officials or disciplinary bodies when so directed. Any failure by any student to promptly and cheerfully obey or to abide by these regulations in this Rule 8 shall constitute a violation of this Code of Conduct.

Rule 9. Cheating, Forgery, and Related Offenses

It shall be a violation of FTCC Code of Conduct for a student to commit any one of the following acts:

1. Academic cheating, including, but not limited to, unauthorized copying of academic work of another, collaboration for use of notes or books on examinations without prior permission of the instructor, and any form of plagiarism as such term is commonly defined;
2. Furnishing of false information to any FTCC personnel; and
3. Forgery, falsification, or fraudulent misuse of any documents, records, or identification cards.

Rule 10. State and Federal Laws

A student shall not violate any State or Federal laws while on FTCC campus or while attending a FTCC activity, function, or event off FTCC grounds.

Rule 11. Student Dress Code

Although FTCC students may dress informally, cleanliness and neatness of appearance must be maintained. Shirts and shoes are required at all times while the student is on campus or at all times while such student is attending a FTCC activity, function, or event off FTCC grounds. Special technical or vocational programs, such as the health programs, may require special dress codes for clinical or laboratory areas. A student shall not attend classes or laboratory work conducted in the clinical or laboratory areas if such student is in violation of the dress codes for such areas.

Rule 12. Involuntary Psychological or Psychiatric Withdrawal

It shall be grounds for dismissal if and when it shall be medically determined that a student poses a threat to the physical well-being of himself or others or if such student has a physical, mental or emotional condition of such a nature as to disturb or disrupt the normal and usual activities of other persons on campus. A student shall agree to have a psychiatric evaluation when it appears to the satisfaction of the President of FTCC, or his designee, that such examination is in the best interest of the student, or FTCC, or both.

VIOLATION OF THE CODE OF CONDUCT

Violations of the Code of Conduct may result in suspension or dismissal of the student from FTCC.

ENFORCEMENT PROCEDURES

Student conduct on FTCC campus or student conduct during a FTCC activity, function, or event held off FTCC grounds that violates Federal and/or State and FTCC regulations may be dealt with in the following manner:

1. The student may be turned over to the civil authority and subjected only to the penalties imposed by that authority; or
2. The student may be subjected to sanctions imposed both by the civil authorities and FTCC; or
3. The student may be subjected to sanctions imposed by FTCC notwithstanding the fact the civil sanctions may not be imposed.

DISCIPLINARY PROCEDURES

A. Instructional Areas

Any instructor may request a student to leave a class, laboratory, shop, or clinical area when, in the opinion of the instructor, the student's conduct or personal demeanor disrupts normal classroom activities. If the student refuses to leave the class, the instructor may call campus public safety for assistance. The instructor, identifying the student and the cause for dismissal from class, will immediately notify in writing the division dean and the dean of student services of actions taken.

The burden of requesting reentry to class, laboratory, or clinical areas shall be upon the student involved. Request for reentry must be made to the instructor before the next class meeting. If the instructor decides that the student needs additional counseling before reentry, the instructor may require that the student meet with the division dean or the counseling staff for further discussion. If the division dean or the counseling staff decides that the student should be dismissed from the class or from FTCC, the instructor will send a written report (approved by the division dean) to the executive vice president for instructional services and the dean of student services. The executive vice president will make the decision on dismissal when applicable and dismiss the student. The student will be given a copy of the report and a written notification of the decision. If a student wishes to appeal the decision, the appeal must be made by writing the Student Appeals Committee within twenty-four (24) hours after receiving the dismissal notice.

B. Noninstructional Areas

Any employee or student may file a written complaint for disciplinary action against any student enrolled at FTCC. The Public Safety Office may temporarily remove a student from campus when the student is jeopardizing the safety and security of faculty, staff, and/or the student body; a written complaint must then be filed. The complaint must be filed with the dean of student services, who will promptly investigate the complaint and make a decision regarding suspension, dismissal, or other disciplinary action. Both the complainant and the student involved will be notified in writing. If the student wishes to appeal the decision of the dean of student services, the appeal must be made by writing the Student Appeals Committee within twenty-four (24) hours after receiving the notice of the decision.

STUDENT APPEALS COMMITTEE

The Student Appeals Committee will hear the appeal of any student after the appeal process has been exhausted at the departmental and divisional level for instructional areas or dean of student services for noninstructional areas. The Student Appeals Committee will hear the appeal of any student regarding the following:

1. discipline;
2. dismissal, except for academic standing;
3. admissions;
4. residency;
5. discriminatory practices;
6. sexual harassment.

The appeal will be heard under the following conditions within two working days of receipt of the confirmed appeal:

1. The student must submit a written statement containing factual and valid reasons for the appeal to the dean of student services, who shall forward the statement of appeal to the committee chairperson. The chairperson may return the appeal to the student to clarify, to add factual information, or to state reasons for the appeal; the chairperson may reject the appeal if policies and procedures have not been followed by the student.
2. The committee will confine itself to making a recommendation on the appeal question and not on the validity of existing policies of FTCC. The committee reserves the right to suggest to the president that a current policy be examined for continued value to FTCC.
3. The committee will submit its recommendation to the president who will make a final decision and who will notify the parties involved.
4. In matters concerning residency classification, the committee's recommendation will be sent to the dean of student services, who will notify the parties involved of the decision. The next step in the appeal process is to the State Residency Committee. Procedures on state appeal are available in the dean of student services' office.
5. Records of the proceedings of the Student Appeals Committee are available upon written request to the dean of student services.
6. The student must obtain special permission from the executive vice president for instructional services to attend classes pending resolution of the case on appeal.

COMMUNICABLE DISEASE OR HANDICAPPING ILLNESS POLICY

FTCC will rely upon medical information and legal advice, on a case-to-case assessment, in making any decision regarding any present or future employee or student who has a communicable disease or a handicapping illness.

Except as provided herein, no person who is suffering from a communicable disease or who is handicapped by an illness shall be excluded from FTCC as a student, a potential student, an employee, or a potential employee because of such disease or handicap.

It is the declared policy of FTCC that upon the receipt of a professional medical judgment that a person suffers from any physical condition or handicap that would be reasonably calculated to jeopardize the welfare of such person or the welfare of student, faculty, administrative staff or other employees of FTCC and that reasonable accommodations to prevent such jeopardy would cause undue hardship to FTCC or would inherently compromise the essential educational requirements of a particular curriculum, then, and in such event, such person may be excluded from FTCC. Additionally, any student enrolled in FTCC or any employee of FTCC that contacts or acquires a communicable disease or a handicapping illness may be temporarily suspended from school or work pending receipt of professional medical judgment by FTCC as to such person's medical condition and whether the provisions of this policy should apply thereto.

It is the further declared policy of FTCC that its faculty, administration and staff shall conduct a continuing information program for all areas of FTCC personnel regarding communicable diseases and handicapping illnesses.

DRUG-FREE STUDENT POLICY

Drug use and abuse by students has become an immediate concern in our society. These problems are extremely complex ones with no easy solutions.

The users of drugs may impair the well being of all students, and the educational environment, and may result in damage to FTCC property.

Therefore, it is the policy of FTCC that the unlawful manufacture, distribution, dispensation, possession or use of a controlled substance is prohibited while on FTCC grounds.

Student Code of Conduct - Rule 7: Narcotics, Alcoholic Beverages, and Controlled Substances

A student shall not knowingly or negligently own, possess, use, transport or be at any time under the influence of any narcotic drug, alcoholic beverage or any other controlled substance (as controlled substance is defined by the North Carolina General Statutes or 21 U.S.C. subsection 812) while on FTCC grounds or during the time when a student is participating in any FTCC activity, function, or event off FTCC grounds. Use of any drug authorized by medical prescription from a registered physician shall not be considered a violation of this rule. However, students shall be held strictly accountable for their behavior while under the influence of prescribed medicines.

1. FTCC does not differentiate between drug users and drug pushers, or sellers. Any student who gives or in any way transfers or aids and abets in the transfer of a controlled substance to another person or sells or manufactures or aids and abets in the sale or manufacture of a controlled substance while on FTCC premises will be subject to disciplinary action up to and including suspension from school.
2. The term “controlled substance” means any drug listed in the North Carolina General Statutes or 21 U.S.C. subsection 812 and other federal regulations. Generally, these are drugs which have a high potential for abuse. Such drugs include, but are not limited to, heroin, marijuana, cocaine, PCP, and “crack.” They also include “legal drugs” which are not prescribed by a licensed physician.
3. The counseling staff will conduct quarterly mandatory drug awareness and education workshops for students. Individual counseling sessions and educational materials will be available in the Counseling Center at all times.
4. The counseling staff will include in orientation sessions reference to drug policies, drug awareness and sources for assistance.
5. The counseling staff will be available to lecture and assist instructional staff with class presentations to help educate students regarding alcohol and other drug use as well as the health risks of drug abuse.
6. The counseling staff will have available referrals for treatment and more extensive assistance.

7. Student Services will assess the institutional environment annually by reviewing data from public safety, counseling center, instructors and other community resources to guide program development for students.

STUDENT ATTIRE

FTCC frequently has prospective employers and other visitors on campus. In addition, many companies seeking to relocate or open new industries will have representatives visiting this campus. Therefore, although FTCC students may dress informally, students are encouraged to dress neatly and cleanly. To ensure safety and to minimize disruptions to other students, shirts and shoes are required at all times.

Special technical or vocational programs may require special attire for clinical or laboratory settings. For example, there are certain areas in the health related programs (i.e., operating room obstetrics, isolation rooms) located in hospitals that require special hospital garments. A student shall not be permitted to attend classes or laboratory work conducted in the clinical or laboratory areas if such student is in violation of the dress codes for such areas. Attire which would create a safety hazard shall not be allowed.



SERVICES FOR STUDENTS

ACCIDENT INSURANCE

Accident insurance covering the hours a student is in school, on field trips, or participating in student activities is provided to all full-time and part-time curriculum students. The student insurance is furnished by Forsyth Technical Community College as a service to students, but it is not meant to replace a student's personal coverage.

BOOKSTORE

The bookstore is operated by FTCC as a service to students, faculty, and staff. Textbooks, school supplies, and course-related materials, as well as other items of special interest to students, are offered for sale. The bookstore is adjacent to the student center in Snyder Hall and is open Monday through Friday from 8:30 a.m. until 3 p.m. and Monday, Tuesday, and Thursday from 6 p.m. until 8 p.m.

The bookstore strives to stock as many texts as possible at the beginning of each quarter, and students may sell some of their used books at the end of each quarter.

Full refunds are given during the first two weeks of each quarter in accordance with policies posted in the store. Books must be unmarked and accompanied by the original sales receipt.

Books for continuing education courses are sold at the West Campus bookstore during specified hours at the start of each quarter.

Summer quarter evening hours will be posted at the bookstore.

COUNSELING CENTER

The Counseling Center maintains a staff of professional counselors whose services are available to students needing help with educational, vocational, financial, social, or personal problems from the time they enter school until they leave. Assistance is provided to facilitate wise choices, decisions, and adjustments associated with being a student. The counselors also serve as consultants to faculty and staff in helping to meet educational needs of students. The counselors are available to both day and evening students in the Counseling Center, and during the day at the Allied Health Building on a specified posted schedule.

Several individualized tests and inventories are available for counseling purposes, and students are referred to appropriate community agencies or resource persons when it is apparent that they can be assisted more effectively in this manner.

Instructors may refer a student who is experiencing difficulties directly to the Counseling Center, or the instructor may request that the counselor contact the student for an appointment.

The counseling staff adheres to a policy of confidentiality for information disclosed in personal counseling sessions. However, exceptions may be made when the counselee represents a danger to themselves or others, or if counselees disclose that they are involved in an illegal activity. Counselors generally do not have protection from disclosure in court.

The counseling staff adheres to the Ethical Standards of the American Association for Counseling and Development.

CAREER GUIDANCE CENTER

The services of the Career Guidance Center are available to applicants and students of FTCC and to other members of the community who need assistance with career planning. Emphasis is placed on activities such as developing and teaching career planning, career counseling, development of decision-making skills, maintenance of a useful career information library, and providing microfiche cataloging and computer information on the Employment Security Commission job bank. Appointments may be made by calling the Counseling Center.

FOOD SERVICE

Complete food service is located in the lower level of Hauser Hall. Canteen service is available in Snyder Hall, Hauser Hall, the student lounge at the Allied Health Building, and in the lunchroom at West Campus.

SPECIAL PROVISIONS FOR HANDICAPPED PERSONS

It is the intent of FTCC that all courses of study be accessible to qualified students. Handicapped persons should provide approximately one quarter of advance notice for the dean of student services in order to identify any special equipment needs and to facilitate adjustments in curriculums, facilities, or schedules, if needed.

Special services currently available for handicapped students include tutors and note-takers, a TTY (telephone for the deaf), and staff members with basic manual language skills. These free services may be arranged in the Individualized Learning Center and in the Counseling Center. Arrangements must be made through the counselor for special populations. The counselor can assist with any special provisions to assist in the learning process. Handicapped students who require attendant care are responsible for their own arrangements.

HEALTH SERVICES

Limited health services are provided through the Public Safety Office. First-aid supplies are located in shop areas; however, injuries requiring more than minor first-aid will be treated in the emergency room of either Forsyth Memorial Hospital or North Carolina Baptist Hospital.

HOUSING

Since FTCC has no dormitory facilities, students who wish to live away from home must make their own housing arrangements. FTCC takes no responsibility for locating or supervising student housing; however, suggestions as to location of off-campus housing may be obtained in the Counseling Center.

INDIVIDUALIZED LEARNING CENTER

Most students have taken courses in the traditional classroom where an instructor stands in front of the class and everyone does the same activity at the same time. In the Individualized Learning Center, students work under the direction of an instructor but cover the subject matter at their own pace using self-instructional texts and audio-visual materials. This way students can work faster and finish a course earlier than they would in a classroom, or they can move more slowly, taking more time on especially troublesome units. When students need help, they receive extended individualized attention from the ILC instructors.

For some students, the Learning Center's individualized approach provides a more comfortable learning environment because there is less pressure and no competition. Another attractive feature of studying in the ILC is the flexibility offered in scheduling courses. The ILC is open from 8 a.m. until 9 p.m. Monday through Thursday and from 8 a.m. until 1 p.m. on Friday. Students can schedule their own hours during these times, enabling them to work around outside commitments such as job hours and family demands. The learning center also offers an alternative if a class is full or is canceled for lack of students. Perhaps the greatest advantage of ILC study is the sense of satisfaction and self-confidence that develops from working successfully in an individualized setting.

In addition to the ILC on the main campus, there is also a center in the Whitaker Rehabilitation Unit at Forsyth Memorial Hospital. This center serves only Whitaker patients.

The following courses are offered for curriculum credit in the ILC:

Medical Terminology I
Medical Terminology II
Business Mathematics
Vocabulary/Terminology I
Vocabulary/Terminology II
Filing
Grammar Skills
Geometry

Basic Reading Skills and Vocabulary II
Basic Reading Skills III
Basic Arithmetic Skills
Structure of Arithmetic
Prebusiness Mathematics
Algebra
Introductory Algebra
Intermediate Algebra
Fundamental Concepts of Algebra
Fundamentals of Mathematics



Assessment and Placement Test (APT) Preparation

Another service offered in the Individualized Learning Center is preparation for the APT, which is the placement exam required of most entering students. The ILC conducts study sessions on each of the test areas covered on the exam. The instructors give tips on how to take the test, administer practice tests and explain the answers to the practice tests. This service is especially helpful to people who are returning to school after a long absence. Contact the Individualized Learning Center for dates and times of these sessions.

Tutoring Services

The tutoring services program provides assistance to students who are experiencing academic difficulties. The main function of these services is to arrange one-to-one and group tutoring sessions. Tutors are recruited primarily from the student body. In those subjects where the demand for tutors cannot be met on campus, other qualified persons are considered for tutor positions. FTCC provides tutor salaries without cost to the students who request assistance.

Skills Lab

The skills lab offers individualized programs to students who need remedial help in a particular class. ILC instructors will work on an appointment basis with these students. Areas covered include general mathematics, algebra, English grammar and composition, reading, and any of the courses taught both in the classroom and in the ILC. Students must be referred by an instructor.

LIBRARIES

The three libraries contain approximately 32,000 books and audio-visual software. Accompanying audio-visual hardware is available for use in the libraries and classrooms.

Main Campus Library

The library, located in Ardmore Hall, is open Monday through Thursday from 8 a.m. until 9 p.m. and on Friday from 8 a.m. until 4:30 p.m.

Although no fines are charged, students are responsible for replacing books that are lost or damaged. Until replacement is made, library privileges will be revoked, students will not be permitted to register, and students' records will be sealed.

Allied Health Library, at North Carolina Baptist Hospital

The library at the Allied Health Building is located on the first floor. It is open Monday through Thursday from 8 a.m. until 8 p.m. and on Friday from 8 a.m. until 5 p.m. This library service all allied health curriculums.

ADN/PNE Library

The ADN/PNE library, which serves students in the ADN and PNE curriculums, is currently found on the first floor of Bob H. Greene Hall on the main campus. In 1992, this library will be moved into the main campus library in Ardmore Hall.

LOST AND FOUND SERVICE

Lost and found articles will be handled by the Public Safety Office. On other campuses, the Library in the Allied Health Building at the North Carolina Baptist Hospital and the Information Registration Center on West Campus will handle lost and found articles. All lost articles of value should be reported to the Public Safety Office.

JOB PLACEMENT OFFICE

The Job Placement Office offers services free of charge to area employers, current students, and graduates of FTCC. Each year the Placement Office receives over 1,000 job listings from area employers. Students and graduates who register with the Job Placement Office may have access to these listings.

In addition to assisting students and graduates in identifying prospective employers, the Job Placement Office provides the following services: individual career counseling; help in writing resumes and cover letters; interview preparation; hand-outs and resource materials; employment applications; and file information on local and regional companies.

A listing of all current job openings posted with the Job Placement Office is displayed on bulletin boards in Parkway, Snyder, Hauser, and Ardmore Halls. The Job Placement Office is located in Ardmore Hall and is open 8 a.m. until 5 p.m. Monday, Tuesday, Wednesday, Friday and 8 a.m. until 9 p.m. on Thursday. For additional information or to schedule an appointment for counseling, contact the Job Placement Office.

STUDENT CENTERS

A large, attractive student center is located on the ground level of Snyder Hall. Students are encouraged to use the center as a place to meet, talk, eat, and relax.

A student lounge is available to students in the health curriculums in the Allied Health Building at the North Carolina Baptist Hospital.

A student lounge and cafeteria are available in Hauser Hall on the ground floor.

GUIDELINES FOR TELEPHONE CALLS TO STUDENTS

Students cannot receive telephone calls or messages at school except for an emergency. FTCC does not have the facilities to forward general messages to students. Relatives, friends, and associates should be asked not to contact students at school. In case of an emergency, however, the staff will make every effort to relay information to students. Those calling in an emergency will be asked to state the nature of the emergency, give a name, and a return telephone number. It is the policy of FTCC not to give out identifying information about students to telephone callers and/or unidentified persons without the permission of the student.

USE OF FACILITIES

The buildings and their contents exist solely for the education of FTCC's adult population. The use of the facilities for any other purpose is strictly prohibited. Any use of these facilities for personal gain will result in immediate disciplinary action.

Smoking is prohibited in all classrooms, laboratories, shops, and auditoriums.

Animals are prohibited inside the buildings. Any animal on the campus grounds must be on a leash in compliance with the City of Winston-Salem Leash Law Ordinance Section 3-18.

Children are not allowed in classrooms or shop areas during class sessions, nor may they be left unattended in the library, canteen areas, or on campus grounds.

PARTICIPANT SERVICE CENTER

FTCC has received funding to develop a Participant Service Center. It is designed to improve the employability of participants by assisting them in overcoming barriers to employment due to educational and skill-training deficiencies. The center serves as a counseling site for JTPA (Job Training Partnership Act) - eligible participants enrolled in an approved curriculum. Emphasis is placed upon the importance of job survival skills, positive work attitudes, job development and placement at program completion. Interested persons may contact the JTPA coordinator.

WINS PROGRAM

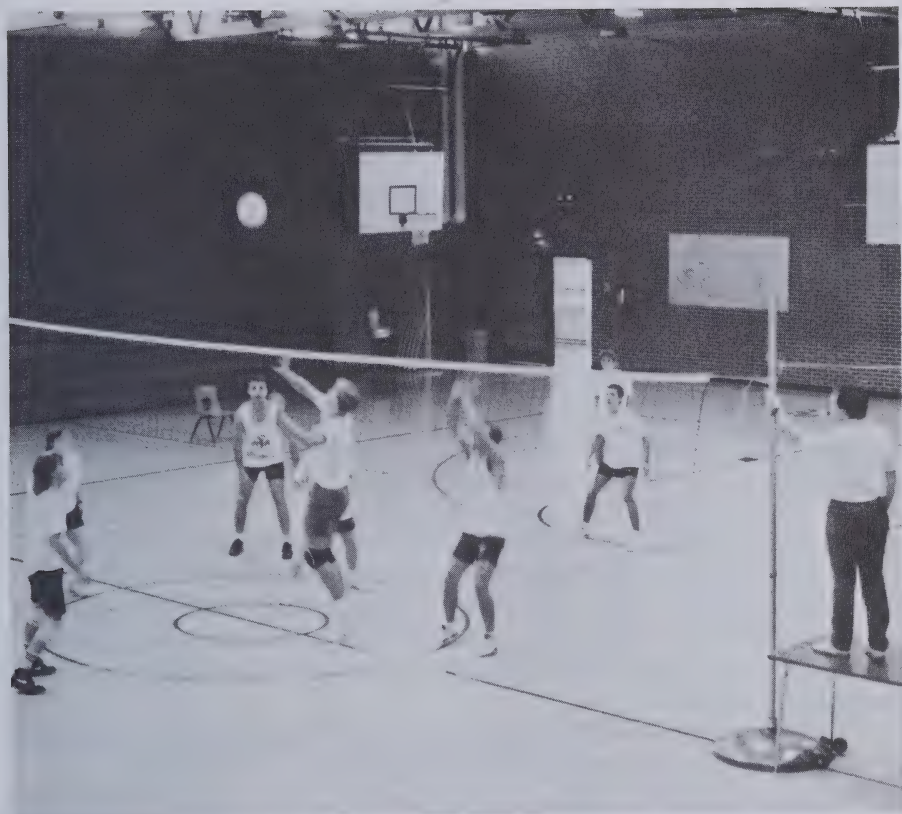
Only a few years ago, career opportunities for women were restricted to a few "traditional" professions. Today's choices and opportunities are almost unlimited. Businesses, industries, and governmental agencies are actively seeking today's woman who has been prepared to enter the growing field of "nontraditional" settings.

The WINS (women in nontraditional settings) Program is a project that is uniquely designed to help prepare women for the changing world of the future. Career opportunities ranging from Architectural Technology to Automotive Mechanics and Computer Engineering Technology to Carpentry and Cabinetmaking are available to those women who can meet today's challenges for higher salaries, more competitive opportunities, and job promotions.

WINS seeks to help break the cycle of women's low pay-low status employment. Women selected to participate in WINS are eligible for financial assistance to supplement the cost of books, child care, and transportation expenses. WINS also provides counseling services, academic advisement, career information, testing, tutoring, and other supportive services to assist women to better cope in nontraditional settings.

To find out how WINS can help women enter and compete in the world of changing opportunities for today's woman, contact the WINS coordinator.





STUDENT CLUBS AND ORGANIZATIONS

STUDENT GOVERNMENT ASSOCIATION (SGA)

The Student Government Association serves to promote interest in student affairs both on and off campus. The association is composed of all students who pay the student activity fee. Three representatives are selected from each of the instructional divisions to serve on the Executive Council. Representatives to the Executive Council elect the Student Government Association officers from within the Executive Council. The student activities facilitator serves in an advisory capacity to the Student Government Association. The Student Government Association and Student Activities Office is located in Snyder Hall.

STUDENT REPRESENTATION ON BOARD AND COMMITTEES

The president of the Student Government Association is a nonvoting member of the Board of Trustees of FTCC. Student representatives also serve on the Student Appeals Committee, the Graduation Committee, and other committees concerned with students.

STUDENT ACTIVITIES

Forsyth Technical Community College strives to offer its students more than an academic education. Efforts are made to provide students with extracurricular opportunities for involvement that will help to educate the total individual. By providing extracurricular activities, FTCC recognizes that a college education includes social, professional, and cultural involvement as well as academics. Students are invited to come by the Student Activities Office in Snyder Hall and find out more about what FTCC has to offer outside the classroom.

STUDENT CLUBS, ORGANIZATIONS, AND ACTIVITIES

Architectural Technology Club

The Architectural Technology Club serves to promote architectural education, to recognize outstanding academic achievement, and to provide related services to FTCC and the community. All students enrolled in the Architectural Technology curriculum are invited and encouraged to join.

Data Processing Management Association (DPMA)

The Data Processing Management Association (DPMA) student chapter provides Business Computer Programming students with opportunities in the data processing field. Members of DPMA have opportunities to learn more about data processing through regularly scheduled meetings of the students, attendance at the local chapter meetings, and field trips to local computer facilities.

Epsilon Delta Gamma

Membership in Epsilon Delta Gamma is open to any student who is, or has been, enrolled in a course of study in the administration of criminal justice.

The objectives of the organization are to promote public understanding of the problems and objectives in the administration of criminal justice and to evaluate the standards of, and foster greater understanding between, the agencies and departments in all areas of the administration of criminal justice.

Phi Theta Kappa Honor Society

Membership in Phi Theta Kappa is open to students enrolled in an associate degree program who have completed 12 or more credit hours with a cumulative grade point average of 3.5 or above. This national organization has approximately 700 affiliate chapters and is sanctioned by the American Association of Junior and Community Colleges.

Society of Respiratory Care Students (SRCS)

The purpose of the SRCS is to increase community awareness of respiratory care, promote student fellowship, improve academic achievement, and generally enhance the educational experience of respiratory students.

Student Chapter of the Society of Manufacturing Engineers (SME)

The Student Chapter of the Society of Manufacturing Engineers is a service and social club open to students from the Manufacturing Engineering Technology and Mechanical Drafting and Design Technology curricula. The club is open to second-quarter students in these two fields of technology. SME has raised and set aside funds for endowing a scholarship.

Student Practical Nurse Organization (SPNO)

The Student Practical Nurse Organization originated in 1983, and its member-

ship is composed of students in this curriculum. Its purpose is to provide opportunities for students to benefit FTCC, the Practical Nurse Education curriculum, and nursing in the community.

OTHER ORGANIZATIONS

Students are encouraged to affiliate with student chapters of various professional and technical organizations and societies.

STUDENT USE OF WEST CAMPUS GYM FOR ACTIVITIES

The gym on West Campus is available for students' use. Weight rooms housing weight machines and free weights are located in both the men's and women's locker rooms. All student activities in the gym must be supervised by FTCC personnel. Hours for gym use will be posted and are subject to change each quarter.

ATHLETICS

Student athletic programs are offered through the Student Activities Office. Sports offered are based on student interest and the availability of faculty or student coaches. FTCC typically offers men's basketball, co-ed volleyball, men's and women's softball, and golf. Teams compete against other community colleges and in the Winston-Salem city leagues.

SPORTS PHILOSOPHY AND PURPOSE

The sports program is intended to provide students with a greater sense of effective community membership through competition with others. A sports program should serve as a laboratory of citizenship by inviting experimentation and learning in leadership, teamwork, strategy, and fair play.

STUDENT PUBLICATIONS

TECHNICALLY SPEAKING is the student newsletter written and managed by a student staff. The newsletter, printed monthly and distributed on campus, provides registration information, a calendar of events, and brief articles about students and staff.

Published annually at the end of the spring quarter, FTCC TECHTALK is a compilation of writing, original art, and photography from students and faculty/staff. Anyone affiliated with FTCC is encouraged to submit material for consideration.



STUDENT FINANCIAL SERVICES

Financial aid provides financial assistance to students who would otherwise be unable to continue their education. The financial need of a student is determined by the resources available to the student in relation to educational expenses.

Students applying for financial aid should complete and mail the American College Testing Program Family Financial Statement (F.F.S.) to the appropriate address. This form should be completed no later than May 1 preceding the academic year for which aid is requested. As financial aid awards are for only one academic year, students must reapply each year. Requests after May 1 will be processed as long as funds are available.

To be eligible for financial assistance, a student must be enrolled or accepted for enrollment and demonstrate a need for financial aid. Financial assistance is available in a variety of forms to help students who are eligible. Scholarships, loans, grants, and workstudy may be used singly or in combination to meet a student's total need.

Financial aid brochures containing more detailed information are available in the Office of Student Financial Services.

SATISFACTORY ACADEMIC PROGRESS STANDARDS
TO MAINTAIN FINANCIAL AID ELIGIBILITY

I. Introduction

Federal and state regulations require that students receiving financial aid maintain satisfactory academic progress. FTCC makes these standards applicable to all federal, state and institutionally awarded financial aid funds in order to maintain a consistent policy for all students receiving assistance.

II. Procedures

For financial aid purposes, satisfactory progress is measured two ways, quarterly and yearly. The procedures for both measurements are as follows:

A. Quarterly Evaluation

Students receiving financial assistance at FTCC must maintain satisfactory progress in their course of study as set forth by FTCC. To be in good academic standing, a beginning student must have earned a grade point average of 2.0 by the end of the first quarter, and a cumulative grade point average (G.P.A.) of 2.0 must be maintained thereafter. A student failing to attain the required grade point average in any quarter will be placed on financial aid probation. A student in this category may receive financial aid for the upcoming quarter, but must complete that quarter with a cumulative grade point average of 2.0 or must have completed a full-time course load (12 quarter hours) during the probation quarter with a 2.0 quarterly average.

If students placed on financial aid probation do not earn the required grade point average, they are considered to be making unsatisfactory progress and are placed on financial aid suspension. Financial aid suspension means the termination of all aid.

Financial aid may be reinstated when a student's work has improved so that the student meets the required 2.0 cumulative grade point average. The student will then automatically be removed from suspension.

B. Yearly Evaluation

Satisfactory progress will be measured once a year in order to determine that students have completed the required amount of credit work towards their degree. Any quarter for which a student registers will be counted toward progression requirements regardless of the student's academic or financial status. Below are the progress requirements:

Length of Curriculum	End of:	Minimum Number of CreditHours Required
Associate Degree Curriculum	4 quarters	12
	8 quarters	36
	12 quarters	72
	16 quarters	103-146
Vocational Diploma Curriculum	4 quarters	20
	8 quarters	65-82

Students who have not satisfactorily completed the required number of credit hours at the end of each year will have their financial assistance terminated.

Please note the following items that can affect the satisfactory progress requirements:

1. **Pretechnical Classification** - All students classified as pretechnical for a curriculum will be required to maintain the quarterly evaluation. However, these students will be allowed one year or a maximum of 45 attempted equivalent credit hours before the yearly evaluation and time limitation requirements are enforced.
2. **Incomplete Grades** - Students who receive an incomplete grade must remove it by the end of the next quarter. Incompletes that are not removed do not count towards graduation and could prevent a student from meeting the minimum credit requirements.
3. **Withdrawals** - Students who withdraw or drop below half-time status for two consecutive quarters forfeit their financial assistance for the following quarter of enrollment. Withdrawals from school after officially registering for courses will count as total quarters attempted for yearly progress evaluation.
4. **Repetition of Courses** - When students receive incomplete grades or unacceptable grades, they are allowed to repeat courses as required by their advisor. In fact, it is recommended that students immediately repeat failing grades in order to improve their grade point average. Students should be aware, however, that while repeating courses count toward graduation requirements, they could cause a student not to meet the yearly satisfactory progression requirements.
5. **Changing Curriculum** - Students who are placed on financial suspension and change curriculums will be allowed financial aid for the first quarter of the new curriculum. However, they must have a 2.0 cumulative grade point average at the end of the first quarter in the new curriculum or be placed on financial suspension. A second change of curriculum will not be funded until satisfactory progress is maintained.

NOTE: Maintaining satisfactory progress for financial aid is not the same as remaining in good standing in a curriculum. Each curriculum has its own requirements. As a result, even though students may still meet satisfactory requirements for financial aid, they may not be permitted to continue enrollment in their curriculum because of failure to maintain standards established in that curriculum.

III. Appeals Procedure for Financial Aid Termination

In order to appeal financial aid termination, a student must be able to document mitigating circumstances. The procedure for appeal is as follows:

1. Students must indicate in writing to the director of student financial services the reason why they did not meet the yearly satisfactory progress requirement and why financial aid should not be terminated. Documentation from the student's advisor or dean to support the appeal is required.

2. The director of student financial services will review the appeal to determine whether or not termination of aid is justified and the student will be advised in writing.
3. A student who wishes to appeal the decision of the director of student financial services may request a committee hearing. The director of student financial services will arrange an appointment for the student with the Financial Aid Advisory Committee for final determination.

IV. Time Limitation

A student will be eligible to receive financial aid for a maximum of 16 quarters. At the end of 16 quarters all financial aid will be discontinued.

GRANTS

PELL GRANTS

The Pell Grant program is a federal aid program designed to provide financial assistance to those who need it to attend post-high school educational institutions. The one-year awards normally range between \$200 and \$1,350. Students may apply by completing the ACT Family Financial Statement or the Application for Federal Student Aid. Applications may be obtained at the Office of Student Financial Services. Students should allow six weeks for processing.

SUPPLEMENTAL EDUCATIONAL OPPORTUNITY GRANT

The Supplemental Educational Opportunity Grant (SEOG) is funded by the federal government and is for students of exceptional financial need who, without a grant, would be unable to continue their education.

NORTH CAROLINA STUDENT INCENTIVE GRANT

The North Carolina Student Incentive Grant (NCSIG) is designed for students of exceptional financial need who are North Carolina residents. Students applying for the NCSIG must do so before March 15.

COLLEGE WORKSTUDY

Workstudy is a federally supported program through which students, primarily from low income families, are given preference for part-time employment (up to 20 hours per week). Students must be enrolled at least half-time to apply for workstudy and maintain satisfactory academic progress.

LOANS

The Office of Student Financial Services maintains a file on sources of financial aid for students. Loans at a low rate of interest are available through the following agencies:

Stafford Student Loan Program

North Carolina Student Loan Program for Health, Science, and Mathematics

**Sloan S. Sherrill Nursing Loan Fund
Winston-Salem Foundation***

*Available to Forsyth County residents only.

**NORTH CAROLINA NURSE EDUCATION
SCHOLARSHIP/LOAN PROGRAM (NESLP)**

This program was an initiative of the 1989 General Assembly designed to address the shortage in trainee nurses practicing in North Carolina.

Loans are available for study in nurse education programs located in North Carolina that lead to a degree or diploma (RN or LPN). Funding is contingent upon appropriations by the General Assembly of North Carolina. All loans are awarded based on need. Contact the Office of Student Financial Services.

NURSING SCHOLARS PROGRAM (NSP)

This program was another initiative of the 1989 General Assembly designed to address the shortage in trained nurses practicing in health care fields in the state.

Eligibility: the NSP will be a competitive scholarship loan. Financial need will not be a criterion. An eleven-member Nursing Scholars Commission was created by the 1989 General Assembly to develop the selection criteria, and method of selection, and select recipients on a statewide basis. Policy for NSP and administrative procedures will be developed under the guidance of the Nursing Scholars Commission.

Students interested in learning more about the NSP can contact the North Carolina State Education Assistance Authority or the nearest North Carolina educational institution offering a nurse education program.

STAFFORD STUDENT LOAN PROGRAM (formerly GSL)

Students who show need, who have been accepted for enrollment, or are enrolled in good standing and maintain satisfactory progress, may borrow up to \$2,625 through College Foundation, Inc. The interest rate is 8% until the end of the fourth year and then changes to 10%. The Federal Government pays the interest during in-school enrollment.

SLOAN S. SHERRILL NURSING LOAN FUND

The Sherrill Nursing Loan is an interest-free loan made through FTCC for second-year Associate Degree Nursing students. For more information and applications, students should contact the Office of Student Financial Services by May preceding the academic year for which a loan is requested.

SCHOLARSHIPS

Students are encouraged to contact the Office of Student Financial Services for additional information and application criteria for the scholarships listed below.

- The A.T.&T. Equal Opportunity Educational Scholarship** is awarded to disadvantaged minorities graduating from Forsyth and Stokes county schools. Selections are based on academic achievements and financial need.
- The R. D. Boyer Scholarship Fund** is awarded annually, based on financial need, to a student pursuing a career in construction occupations.
- The Carolina Telephone and Telegraph Scholarship** is awarded annually to two students. Priority is given to unemployed and/or minority students.
- The Corn Products Scholarship** is awarded annually to students entering the second year of a business related curriculum. The scholarship is for Forsyth County residents only and is based on academic ability and financial need.
- The Gladys Craig Horticulture Technology Scholarship** is a perpetual scholarship available to Horticulture Technology students.
- The Mary Kate Dixon Horticultural Scholarship** is awarded annually to an outstanding student entering the second year of Horticulture Technology.
- The Forsyth County Medical Auxiliary** awards scholarships to students entering the Associate Degree Nursing and allied health curriculums. The awarding of these scholarships is not controlled by FTCC.
- The Norman Gaddis Scholarship** is sponsored by the Student Government Association. It is primarily an emergency scholarship for students eligible for financial aid when funds are not available from other sources.
- The Integon Scholarship** is awarded annually to a deserving Administrative Office Technology student and is based on need, academics, and good citizenship.
- The Sandra Johnson Memorial Scholarship** is awarded annually to an outstanding student entering the second year of Administrative Office Technology.
- The Marshall Paul Johnston Scholarship** is a perpetual scholarship available to Automotive Mechanics students.
- The Stratford Kiwanis Club** sponsors a scholarship for students enrolled at FTCC. Priority is given to graduating seniors with a handicap. The awarding of this scholarship is not controlled by FTCC.
- The Winston-Salem Kiwanis and the Twin City Kiwanis Clubs** award scholarships to seniors graduating from Forsyth County schools each year. The awarding of these scholarships is not controlled by FTCC.
- The Mary B. Lauerman Memorial Scholarship** is awarded annually to a full-time student with the highest cumulative grade point average entering the second year of Associate Degree Nursing.
- The Randall R. Jones Scholarship** is awarded quarterly to a machinist student with the highest grade point average.
- The Modern Machine Scholarship** is awarded annually to a deserving student in the Welding curriculum and is based on academics and need.
- The Jane Gaither Murray Scholarship** is awarded annually to a deserving student entering the Associate Degree Nursing curriculum.
- The North Carolina Community College Scholarship** is awarded annually to twenty-two students. Priorities are given to unemployed and/or minority students.
- The Lynne Breedlove O'Rourke Memorial Scholarship** is awarded annually to an outstanding student entering the second year of Radiologic Technology.

The R. J. Reynolds Tobacco Company Scholarship is awarded annually to an outstanding student entering the second year of Manufacturing Engineering Technology, Electronic Engineering Technology, and Mechanical Drafting and Design Technology.

The Mr. and Mrs. Henry F. Snyder, Sr. Scholarship is used primarily as an emergency scholarship for students eligible for financial aid when funds are not available from other sources.

The Soroptimist International of Winston-Salem Scholarship is awarded annually to a deserving woman entering the second year of Accounting Technology.

The Southern Bell Telephone and Telegraph Scholarship is awarded annually to two full-time students. Priority is given to applicants with highest financial need and applicants whose job skills have become obsolete due to economic recession.

The 1990 Student Government Association/Tom Mayerchak Scholarship is awarded annually to three students in a technical transfer program with a minimum GPA of 3.00.

The Wachovia Technical Scholarship is awarded annually to three students who are enrolled full time in the second year of a technical curriculum and is based on need and scholastic promise.

The Louise G. Wilson Scholarship is available to poverty level Forsyth County residents who are accepted or enrolled in the vocational or technical curriculums.

The Winston-Salem Home Builders Association Scholarship is awarded annually to a deserving student in the Carpentry and Cabinetmaking curriculum and is based on academics and need.

Other than the scholarships listed above, there are various individuals and organizations who contribute money yearly for scholarships to needy students. Most of the money available is not restricted; however, some of the scholarships are restricted to individuals enrolled in specific curriculums.

OTHER SOURCES OF AID

Other sources of aid not administered by FTCC are available for eligible students. Interested students should apply with the appropriate agency. The Office of Student Financial Services can assist the students in making the initial contact with the sources listed below:

North Carolina Veterans Affairs Scholarships
North Carolina Vocational Rehabilitation
North Carolina National Guard Tuition Assistance Plan
Job Training Partnership Act (JPTA)
Dependency and Indemnity Compensation (VA)
Winston-Salem Foundation

VETERANS' BENEFITS

FTCC is approved for the training of persons eligible for benefits administered by the Veterans Administration (VA).

The Admissions Office will help applicants select a program of study and explain the procedures for enrolling in FTCC. All admission requirements must be completed before veterans' paperwork can be started. Admissions will require application forms, testing, and the receipt and evaluation of transcripts for all prior training.

Once the admissions procedures are completed, the eligible person should contact the Office of Student Financial Services to begin benefits processing. The actual enrollment certification and related documents will not be submitted to the VA Regional Office until the new student registers for courses.

Veterans are responsible for being familiar with the information found in the Student Handbook, College Catalog, and Veterans' Brochure. The Veterans' Brochure may be obtained in the Office of Student Financial Services.

HOURS OF PAY

Veterans' benefit payments are issued monthly and are based on training for a prescribed number of hours.

Enrollees in two-year technical curriculums are classified according to the number of credit hours per quarter.

Full time	12 or more credit hours
3/4 time	9-11 credit hours
1/2 time	6-8 credit hours

Enrollees in one-year vocational curriculums are classified according to the number of weekly contact hours per quarter.

Full time	a minimum of 22 contact hours
3/4 time	a minimum of 16 contact hours
1/2 time	a minimum of 11 contact hours

STANDARDS OF PROGRESS

Federal regulations require that students receiving veterans' benefits must maintain standards of academic progress and conduct.

SATISFACTORY ACADEMIC PROGRESS

The Academic Standing section described the basic academic requirements for all students. A 2.0 cumulative grade point average must be maintained and a probationary period of not more than one quarter is permitted. Progress is reviewed on a quarterly basis and performance in the major subject areas and preparatory/ refresher classes are considered as well.

If a veteran or eligible person is classified as making unsatisfactory progress, a report will be submitted to the Veterans Administration and benefits will be terminated. Termination will take place effective with the posting of grades at the end of the probationary quarter. Recertification will not be made until satisfactory progress has been established by the veteran regaining a 2.0 cumulative grade point average.

Students must request recertification in writing to the director of student financial services following the quarter in which satisfactory progress has been reached.

SATISFACTORY CONDUCT

Conduct in accordance with the section on Student Conduct and Responsibilities is expected of all students. Dismissal of veterans or eligible persons for unsatisfactory conduct will be reported to the Veterans Administration and benefits will be terminated.

SATISFACTORY ATTENDANCE

All students are expected to maintain satisfactory attendance as defined in the section on attendance. Eligible persons dropped from courses for nonattendance, poor attendance, or those who withdraw, will be terminated or have their hours reduced effective with the last day present in class. Unless special circumstances are involved, the Veterans Administration may determine this termination or reduction to be an overpayment retroactive to the beginning of the quarter.

Complete withdrawals for two consecutive quarters will be considered unsatisfactory attendance, resulting in benefits being terminated. Benefits can be reinstated by satisfactorily attending a complete quarter without certification. Certification will be done retroactively for this quarter upon the veteran's request.

PUNITIVE/NONPUNITIVE GRADES

Federal regulations prohibit payment for grades that do not count as progress toward graduation. Audits are not payable. A grade of WF is punitive because it counts as an F in grade point average computations. A grade of W or WP is nonpunitive. If an eligible person receives a grade which reduces his training time, a report is submitted to the Veterans Administration. In the case of punitive grades, the effective date of adjustment is the last day present in class. In the case of nonpunitive grades, the effective dates of adjustment will be an overpayment retroactive to the beginning of the quarter, unless special circumstances are involved.

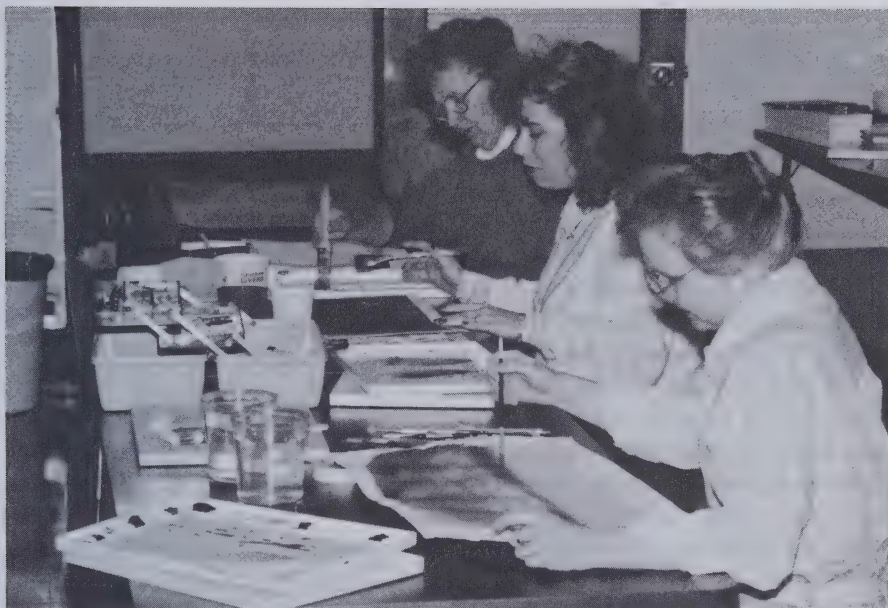
COUNSELING SERVICES AND OTHER INFORMATION

Students may contact the Office of Student Financial Services concerning availability of counseling services or come directly to the Counseling Center.

Questions concerning standards of progress/conduct should be directed to the Office of Student Financial Services.

Questions concerning eligibility, enrollment, curriculum changes, withdrawals, attendance, pay problems, or information in general should be directed to the Office of Student Financial Services.

There is a veterans' information booklet available which contains more detailed information concerning the various requirements for receipt of benefit payments.



ADULT CONTINUING EDUCATION

The Adult Continuing Education Division of Forsyth Technical Community College provides appropriate, economical, and convenient learning opportunities for those citizens who are 18 years old or older. The opportunities are based on individual need and previous educational achievement. They range from the first grade through high school and extend into vocational, technical, and general adult continuing education. Training is available to all of suitable age who wish to learn and can benefit from the instruction provided.

The Continuing Education Division provides a balanced educational program that encompasses a wide variety of course offerings that will meet the educational needs of employed and unemployed adults. The specific areas include Adult Basic Education, High School Diploma Program, Occupational Extension, New and Expanding Industry, Management Development Training, Academic, Avocational and Practical Skills. New programs and/or courses are periodically developed when needs become apparent.

The primary goal of the Adult Continuing Education Division is to provide quality adult continuing education courses in convenient locations at a low cost for the citizens of Forsyth and Stokes counties.

The general program objectives are:

1. To provide expanded educational opportunities for those adults who would not otherwise continue their education.
2. To provide relatively inexpensive, nearby educational opportunities for high school graduates, school dropouts, and adults.

3. To provide programs of vocational/technical education for employed and unemployed adults who need training or retraining.
4. To provide short courses that will meet the general adult and community service needs of the people in the community.
5. To provide requested vocational and technical training programs for new and expanding industry in the FTCC service area.

GENERAL INFORMATION

Adult Continuing Education courses are scheduled quarterly. Preregistration is required for all courses and programs. Preregistration can be accomplished by calling or coming by the Adult Continuing Education Office located on the West Campus at 1300 Bolton Street. Official registration takes place at the first class meeting. Registration is completed by filling the necessary registration forms and paying the required fees. The Registrar's office keeps an official record of achievement for each student enrolled in Adult Continuing Education. Approximately 40 percent of the courses are taught on the FTCC main campus and west campus. The remainder are taught in various locations in the community. Many courses meet during the day; however, approximately 80 percent of courses meet during the evening hours.

ADMISSIONS REQUIREMENTS

All persons who take Adult Continuing Education courses must be eighteen (18) years old or older. However, high school juniors and seniors may enroll provided they have approval from the school system. One is required to preregister in order to take a continuing education course.

COST

A registration fee is required for all Adult Continuing Education courses except Literacy Programs: Adult Basic Education, English As A Second Language, GED, Adult High School, and Compensatory Education. Some courses have additional supply fee charges. Volunteer firemen, fire department personnel, volunteer rescue and lifesaving department personnel, local law enforcement officers, and persons sixty-five (65) or older are exempt from paying the registration fees.

CEU CREDITS

Most Adult Continuing Education courses that meet for ten or more contact hours are approved for Continuing Education Units. C.E.U. credit is based upon the number of hours a course is scheduled to meet. One C.E.U. is awarded for every ten hours, and any portion thereof, a person attends class. (For example, a course that meets for 22 hours awards 2.2 C.E.U.'s) The Management Development Training Program awards a diploma. A high school diploma is awarded to those who successfully complete the Adult High School Diploma Program.

OCCUPATIONAL EXTENSION PROGRAMS

The Occupational Extension programs and courses are designed to provide an opportunity for working adults to gain or to improve vocational/technical skills. The programs also serve the business and industrial community by upgrading the skills of employees.

The Occupational Extension Programs include:

1. **Management Development Training** - designed to train or upgrade supervisors, potential supervisors, small business owners, and management trainees in business and industry.
2. **Vocational/Technical Courses** - designed to upgrade skills and knowledge in certain occupational and technical areas. These courses also provide many adults with an opportunity to gain new skills.
3. **Fire Service Training** - designed to provide practical training in all areas of fire fighting, to assist new volunteer fire departments in training personnel, and to provide upgrade training for the personnel of existing volunteer fire departments.
4. **Seminars and Workshops** - developed for the purpose of providing specialized training for particular groups.
5. **Law Enforcement Training** - designed to train personnel in basic law enforcement and to provide upgrade training for persons who are currently employed in the profession.
6. **New and Expanding Industry Training** - designed to train individuals in specific skill areas for jobs created by new or expanding industries.
7. **Health Related Training** - designed to provide upgrade training to persons who are employed in health professions and prepare persons to become employed in health related areas.

MANAGEMENT DEVELOPMENT TRAINING

Management Development Training (MDT) is an educational program designed to upgrade the competency of supervisory and mid-management personnel in business and industry. Classes are scheduled in accordance with the needs of industry.

Supervisors or potential supervisors may qualify for an MDT Diploma by completing sixteen (16) courses. For supervisors pursuing the MDT Diploma, it is suggested that this program be planned to cover a two-year period. Most of the courses are taught during the evening hours.

Applicants for this program should presently be a supervisor or have ambitions to become a supervisor. There are no prerequisites for entry into this program. There are four required courses and most courses are scheduled to meet one night per week for eleven (11) weeks.

Listed below are course descriptions for some of the more popular Management Development Training courses:

Art of Motivating and Leading People-Emphasis is placed on specific problems in

the area of motivation. The course should provide self-evaluation for those attempting to motivate others. This course is also designed to acquaint people with some of the techniques of leadership and to develop in them some understanding and appreciation of human behavior and how employees develop attitudes about their jobs, their employers, and their supervisors.

Conference Leadership-This course is designed to train supervisors in the techniques and procedures of managing a group of people solving their collective and individual problems.

Introduction to Data Processing-This course is designed to introduce the student to basic terminology, concepts, and principles of business data processing and programming. Emphasis is on basic preparation for learning a programming language.

Principles of Management-This course involves the definition, function, history, purpose, and scope of management. Also covered in the class will be schools of thought in administration and management, the management process (planning, organizing, staffing, directing, controlling, coordinating, and decision making), tools of administration (authority and communication), and administrative responsibility.

Principles of Supervision-This course is designed for the person who is in a supervisory capacity. Subjects covered will include fundamentals of supervision, relationships on the job, communications, training workers, performance evaluation, grievances and discipline, absenteeism, job management, managing time, encouraging self-improvement, human relations, and motivation.

Speed Reading-This course is designed to improve the student's ability to read rapidly and accurately. Special machines are used for class drill to broaden the span of recognition, to increase eye coordination and word group recognition, and to train for comprehension in larger units.

See Adult Continuing Education General Course Listings, published each quarter, for courses.

VOCATIONAL AND TECHNICAL COURSES

Courses in this program are occupationally oriented, providing adults with the opportunity to upgrade skills and knowledge in certain vocational and technical areas. This program includes upgrade training in such areas as drafting, health occupations, fire service training, and welding. It also gives the regular curriculum graduates of FTCC an opportunity to participate in a continuing education program after entering the world of work.

The following are course descriptions of some of the more popular vocational and technical extension courses:

Arc Welding Processes-A special arc welding course to include shielded metal arc welding (Stick), tungsten inert gas welding (TIG), and metal arc inert gas welding (MIG).

Auto Body Repair I-This course is an introduction to the history of automobile

construction, body repair, hand tools, molding fasteners, and minor sheet metal repair procedures. No prerequisites.

Auto Tune Up-This is a course designed for the car owner who would like to be able to perform a minor engine tune-up without having to invest a lot of money for testing equipment. This course will cover basic fundamentals of engine operation with emphasis placed on items such as distributors, ignition, timing, carburetors, and many smaller items that assure a good engine tune-up.

Electronics, Electrical Fundamentals, Level I-This course will define basic units, volts, amperes, ohms, etc. It will investigate mathematical relationships as applied to electrical units. Ohm's law will be thoroughly covered. Electromagnetics and the operation of relays, motors, and generators (both AC and DC) will be discussed. Students will be introduced to electron theory and briefly how electron tubes and solid state devices operate. Students will be shown how to use basic electrical/electronics measurements devices. No prerequisites.

Digital Basics for Electronic Servicing I-This course will cover the type of components used extensively in control circuits and computer applications. It will start with the basics of binary numbers and progress through the development and application of microprocessors. The complete course will consist of two quarters. Prerequisite: A good working knowledge of solid state components or one year of electronic schooling.

Machine Shop Practices I- Basic machine shop practices will include the following: introduction to machine tools (drill press, lathe, milling machine, shaper, grinders, etc.), care and use of basic hand tools and measuring instruments, elementary layout and processes on lathe, drill press, and off-hand grinding of tools. Safety glasses required.

Major Home Appliance Repair I-This course is designed to familiarize persons with the proper operation of refrigerators, ranges, dishwashers, washers, and freezers. Students will be trained in troubleshooting techniques and repair which will involve the use of meters and circuit diagrams for each of the appliances mentioned above. Safety glasses required.

Mechanical Drafting & Sketching I-Instruction will include language of drawing, projections (orthographic, isometric, oblique), alphabet of lines, dimensioning and lettering, freehand sketching, and instrument drawing techniques.

Oil and Gas Burner Service-This course covers the following: oil burner fundamentals (operation, control, and service of oil burner systems); installing and servicing electric heating elements and their controls; principles of operating, installing, and servicing hot water and low pressure systems. Safety glasses required.

See Adult Continuing Education General Course Listings, published each quarter, for courses.

FIRE SERVICE TRAINING

Fire Service Training is designed to provide practical training in areas of fire prevention and fire fighting. Courses are offered primarily to new volunteer fire department personnel. Upgrade training courses are provided for personnel who are already volunteers participating in fire departments and for professional fire fighters

who are employed by the City of Winston-Salem. Fire Training Service courses are provided to professional and volunteer firemen free of charge.

Persons interested in further information regarding these courses should call or come by the Adult Continuing Education Office, West Campus.

SEMINARS AND WORKSHOPS

Seminars and workshops are developed for the purpose of providing specialized training and educational programs for specific groups and organizations. Seminars and workshops have been conducted in the areas of hotel-motel management, energy conservation, cosmetology, occupational safety and health, and visual emission control.

LAW ENFORCEMENT TRAINING

Law enforcement education is primarily entrance-level training for public safety officers. In addition, this same training is offered to the Forsyth County Sheriff's Department. This 240-hour course was established by the North Carolina Justice Academy and includes 35 law enforcement topics. It is a mandatory minimum standard for basic police training in North Carolina. It is designed to provide the newly employed law enforcement officer with basic job knowledge, skills, and abilities to perform entry-level police work. The material includes constitutional law, the North Carolina Criminal and Motor Vehicle Law, traffic accident investigation and reporting, basic laws of arrest, search and seizure, evidence, patrol operation, firearms, and defensive tactics.

In addition to the 11 weeks of law enforcement, entrance level training for public safety officers includes ten weeks of fire suppression, three weeks of emergency medical, and five weeks of behavior science.

HEALTH-RELATED TRAINING PROGRAMS

Health-related training is designed to provide upgrade training to persons in the health professions and to assist persons in preparing themselves to become experienced in health-related areas. This training provides the student with entry-level job skills.

The courses are designed to upgrade as well as update knowledge and skills in specific areas. Courses are also offered to provide training for professionals who have not practiced in several years, enabling them to reenter their profession with competence.

Listed below are course descriptions for some of the popular health-related training courses:

Cardiopulmonary Resuscitation (CPR) & Advanced First Aid- This course is designed for those persons who wish to expand their knowledge of first aid such as fire rescue squad and emergency personnel. Upon satisfactory completion of this course, the student will be awarded an American Red Cross Advanced First Aid and Emergency Care Certificate. The student will be certified in CPR by the

American Heart Association. Standard First Aid is not a prerequisite for this class.

Emergency Medical Technician (EMT)- The purpose of this course is to prepare professional and volunteer EMT personnel to take the state examination for certification. It is jointly sponsored by FTCC and the North Carolina Office of Emergency Medical Services. The course is approximately 96 hours in length including both classroom and lab instruction.

Homemaker-Home Health Aid- This course provides training in the skills necessary to assist the home-bound individual with personal hygiene, companionship, and provision of a safe and clean environment. The psychological aspects of aging will be a major emphasis throughout the course.

Licensed Practical Nurse (L.P.N.) Refresher- This course is designed to prepare the L.P.N. who has been out of nursing a number of years to go back to work with the necessary skills. There is a total of 90 classroom hours and 90 clinical training hours. The main areas of instruction will include general medical and surgical nursing, experience with the functions of the L.P.N., and the L.P.N.'s relationship to the health team.

Medical Terminology- Students taking this course will acquire a working knowledge of terms encountered in medicine. The course will also orient the student to the use of reference books dealing with medical terminology.

Nursing Assistant- The purpose of this course is to provide those who are generally interested in patient care with the opportunity to acquire a basic understanding of the principles involved and to develop skills necessary to assist the nurse in providing safe, efficient, and effective patient care. There is an introduction to basic scientific principles, the structure and function of the human body, and the changes which illness and aging produce. Approximately one-third of the course time is spent working in the hospital. The clinical time gives the student the opportunity to relate to patients and their families, to develop skills in performing nursing procedures, and to become a functioning part of the nursing team.

Registered Nurse (R.N.) Refresher- This course is designed to prepare the R.N. who has been out of nursing for several years to return to work. The course includes general medical and surgical nursing, new equipment, procedures, charting, documentation, medications, I.V. therapy, and physician's orders. Students will be allowed to perform patient care under the direct supervision of an instructor.

Unit Secretary- This course is designed to prepare a person to work as a unit secretary in either a hospital or nursing home. The student is trained to keep and maintain clerical items for doctors and nurses to perform patient treatments. Some of the areas covered include medical and drug terminology, scheduling surgery and special procedures, telephone techniques, receptionist's duties, and the intercom.

Venipuncture Technician- This program is designed to train students to collect lab specimens for analysis. The program consists of two eleven-week sessions of instruction. During the first eleven weeks, the student will receive classroom instruction in anatomy and physiology and human relations. The second eleven week period provides classroom instruction in principles and practice of speci-

men collection and medical communication skills. During this session the student will also be involved in clinical training. Upon successful completion of both the classroom and clinical instruction, the student will be awarded an appropriate certificate.

See Adult Continuing Education General Course Listings, published each quarter, for courses.

COMMUNITY SERVICE PROGRAMS

The general adult enrichment program is designed to meet the avocational needs of individuals in the community. Individuals have an opportunity to broaden their educational base by taking courses tailored to their personal interest, growth, and development. The various courses are offered during the day and evening hours. Although the courses are avocational in nature, some students find the courses beneficial in their specific occupations.

Listed below are course descriptions for some of the more popular courses:

Acrylic Painting-The students start by using a picture or photograph to paint from, then progress to composing original paintings. Instruction includes how to blend colors, how to obtain depth, and how to soften colors so they are not raw. Still lifes will be arranged for painting; field trips may be scheduled.

Cake Decorating-Emphasis will be placed on decorating equipment and its use. The course will also emphasize the decorating of birthday, anniversary, and special occasion cakes.

Macrame-Basic macrame knots will be learned in construction knotted projects such as jewelry, plant holders, wall hangings, and articles of clothing such as belts, vests, and other apparel.

Oil Painting-This is an introductory course to oil painting. Included are acquisition of materials, basic understanding through lecture, accomplishment of one complete oil painting, and a realistic study of still life.

Sewing: Clothing Construction I- The student will receive instruction in selecting proper pattern size, fabric selection, and operation of the sewing machine. A garment will be constructed in class. This class is for the beginner.

Upholstery-This course is designed for nonprofessional persons who wish to learn to upholster. Students must bring a small upholstered chair to practice the principles learned in class.

Wallpaper Hanging-This course will make the student aware of the different types, quality, and patterns in wall coverings. It will provide demonstrations and limited practice in removing old wallpaper and preparation for covering and pasting up paper.

See Adult Continuing Education General Course Listings, published each quarter, for additional courses.

ACADEMIC PROGRAM

The Academic Extension Program encompasses the areas of the Adult High School Diploma Program and other academic programs.

ACADEMIC COURSES

The Academic Extension Program offers a variety of one-quarter terminal courses designed for self-interest and self-development. Classes are usually conducted one day or two evenings per week. These courses offer students an opportunity for self-improvement in cultural and avocational areas. Listed below are course descriptions of some of the more popular courses:

Calligraphy-The art of italic handwriting will be taught. Included in instruction will be writing tools and materials required, the care of the tools, the proper posture and pen hold necessary, the proper letter strokes, the joining of letters, and pen lifts and spacing.

Financial Management-Where Does Your Money Go?-This course is designed to aid individuals identifying all aspects of financial management. Investments, taxes, insurance, living expenses, and credit will also be discussed.

French Conversation-This course will teach the basics of French so the student may travel and visit comfortably in a French-speaking country. Basic vocabulary and conversation related to hotel, shopping, transportation, directions, and restaurant matters will be stressed. Individual student needs will be considered. Culture will be discussed as it pertains to dealing with people of the French-speaking countries.

Income Tax-This course involves the study and application of the federal and state income tax system. Emphasis will be placed upon gathering the data necessary for preparation of tax forms, i.e. 1040. Actual preparation and deductions will be completed in class.

Investments/Stock Market-This course, designed in a seminar format, includes basic information on money, interest rates, various savings and investment vehicles, tax shelters, retirement plans, and estate planning. Students are taught and encouraged to begin the development of a personal financial plan.

Sign Language I-This is a course for hearing people who have a need or desire to communicate or improve their communication with the deaf. Instruction is given in basic manual communications with the deaf including language of signs and finger spelling.

Real Estate Exam Prep., Brokers-This course is designed to prepare applicants for the North Carolina Licensing Exam for Real Estate Salesmen and Brokers. The course will cover real estate fundamentals, law, appraising, brokerage, finance, and closing procedures.

Real Estate Exam Prep., Salesmen-For adults who need to prepare only for the salesmen's portion of the state exam, this course meets two nights each week for six weeks. Persons taking this course **MUST** have a sponsor in order to take the state exam.

Real Estate, Math-This course will stress basic skills in mathematics with practical problem-solving exercises directly related to real estate computation. This course is for the students preparing for the North Carolina Real Estate Licensing Exam.

Religion: The Early Christian Church-The purpose of the course is to explore the origins and history of our present-day Christian movements and denominations. The course is intended to answer questions that have arisen as to **why** and **how** Christianity is divided into many churches. By attempting to answer these questions, the student can hopefully begin to see the oneness that is in all Christian traditions. Also, such an understanding will no doubt help one to accept the differences among denominations and to appreciate their contributions to religious, societal, and cultural developments. The period covered will be from the first century A.D. through the sixteenth-century Protestant Reformation. Students will study culture and history from the standpoints of impact upon personalities and teachings, and in turn, the impact that these personalities and theologies have made upon history, culture, and society.

Wills, Trusts, & Probate-A basic course to help an individual to understand the purpose of a will, its effect on one's property, and the effect of not having a will. The course will deal with probate, responsibility of a personal representation, and taxation in regard to wills. The second part of the course deals with establishment of a trust and its use to an individual.

See Adult Continuing Education General Course Listings, published each quarter, for courses.

LITERACY EDUCATION PROGRAMS

ADULT HIGH SCHOOL DIPLOMA PROGRAM

FTCC, in cooperation with the Winston-Salem/Forsyth County School System and Stokes County School System, offers day and evening courses for high school credit to adult students who wish to obtain an adult high school diploma. Courses are taught at FTCC West Campus and South Stokes High School.

Classes meet weekly during the day and evening hours. There may be slight variations in time. Each class meets a total of 6 hours per week for 11 weeks. Students may carry as many as 4 courses per quarter. A total of 20 courses is needed to complete the program. A passing score on the high school competency test is required before graduation. No student will receive credit for a course if cumulative absences and/or tardies total more than 6 hours. Late enrollment will represent absences.

Generally, persons to be enrolled must be 18 years old or older. Under certain circumstances, however, 16 and 17 year olds may be enrolled by special permission. These applicants must still meet the requirements as set forth in state guidelines. Each enrollee must have completed the eighth grade in an accredited school or the eighth-grade level in the Adult Basic Education Program conducted by the Department of Community Colleges.

Information regarding eligibility, courses needed for graduation, and registration for classes can be obtained from the Admissions Office at FTCC between 8 a.m. and 8 p.m., Monday through Thursday, and between 8 a.m. and 5 p.m., Friday.

Registration is free; however, students must furnish their own books and supplies. Transcripts of work completed will be furnished by the Registrar's Office on written request of the student.

ADULT BASIC EDUCATION PROGRAM

The purpose of the Adult Basic Education Program is to provide the education for the uneducated or undereducated adult with less than an eighth grade education. The program is designed for those adults over 18 years of age whose inability to speak, read, or write the English language makes it difficult for them to find jobs or remain in their present jobs. English as a Second Language classes provide communication instruction to foreign students.

The primary objectives of the program are as follows:

1. To enable these adults to become less dependent on others.
2. To enhance their ability to benefit from other occupational training.
3. To increase their opportunities for better and more rewarding jobs.
4. To make them better able to meet their adult responsibilities.
5. To allow them to obtain an eighth grade educational level.

Adult Basic Education classes are held at various locations throughout Forsyth and Stokes counties. Classes are conducted during the day and evening hours. Classes usually meet two nights per week, three hours per night. No fees are charged to the student, and all books and materials are supplied free of charge.

COMPENSATORY EDUCATION PROGRAM

The purpose of the Compensatory Education Program is to provide educational opportunities that will enable mentally handicapped adults to function in society at a level which will allow them to reach their fullest potential. Areas within the program of study are:

1. Language
2. Math
3. Social Science
4. Community Living
5. Health
6. Consumer Education
7. Vocational Education

Compensatory Education classes are held at various locations in Forsyth and Stokes counties as well as on FTCC campus. No fees are charged to the student, and books and materials are supplied free of charge.

GENERAL EDUCATIONAL DEVELOPMENT (GED)

The Tests of General Educational Development were developed by the American Council of Education for persons who have not graduated from high school. They are designed to measure, as nearly as possible, the skills and concepts generally associated with four years of regular high school instruction.

Using a multiple-choice question format for each of the five tests (Writing Skills,

Social Studies, Science, Interpreting Literature and the Arts, and Mathematics), as well as an essay for Writing Skills Test, the test battery corresponds to the general framework of most high school curricula. The context of items attempts to measure skills relevant to adult experience, rather than the ability to remember facts, details, or precise definitions.

All fifty states, the District of Columbia, U.S. territories, ten Canadian provinces and territories, and several foreign countries now use results from the GED Tests as a basis for issuing high school credentials. These diplomas are official documents that are nearly always accepted as valid credentials by employers and directors of training programs. In addition, all community colleges and some four-year colleges and universities have admissions policies that permit GED Test score reports to be accepted in lieu of complete high school transcripts.

Upon successful completion of the GED Tests, a high school diploma equivalency is issued by the North Carolina Department of Community Colleges. FTCC is one of the 83 official GED testing centers in the state and is the only one in Forsyth County.

Persons are encouraged to complete a GED Preparation class prior to taking the real test. In order to register for one of these classes, students must call the GED Center at FTCC's West Campus. GED Preparation classes are offered at selected sites throughout Forsyth and Stokes counties.

The GED Test is given by appointment only at FTCC's West Campus. In order to schedule a time for testing, examinees must call the GED Center. There is a \$7.50 fee for taking the GED Test.

Even though the GED program is designed for adults 18 or over, persons 16 and 17 may be admitted when certain conditions are met. The State Board and the Community College System, however, shall encourage these persons to complete high school rather than seek testing for the High School Diploma Equivalency.



ADULT CONTINUING EDUCATION

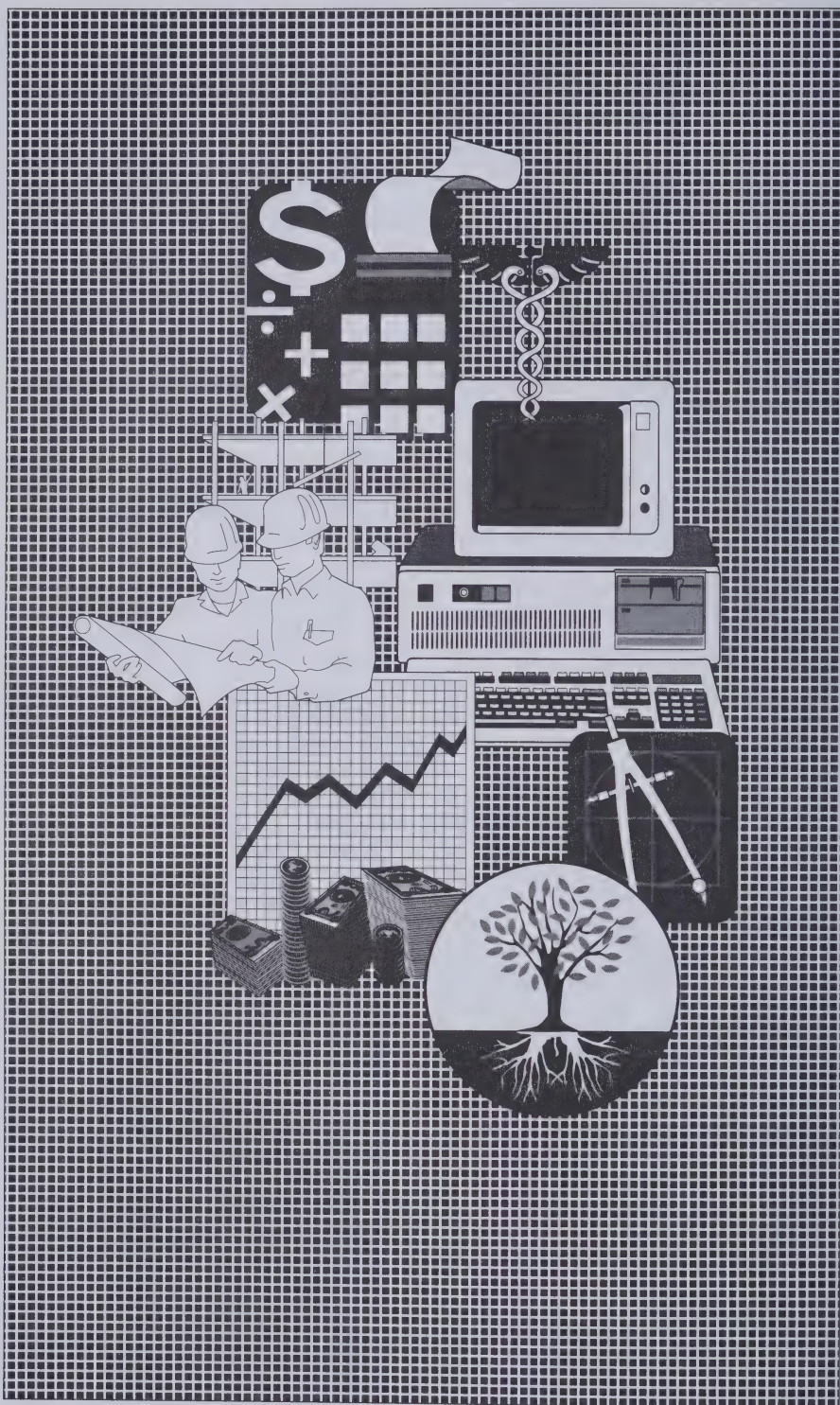
GENERAL COURSE LISTINGS

See Continuing Education Course Listings Brochure for current quarterly course offerings.

Abusive Use of Drugs	Communications, Effective
Accounting	Computer Fundamentals
Acrylic Painting	Conference Techniques for Supervisory Personnel
Activity Coordinator Training	Cooking and Nutrition
Adolescent Psychology	Cooking: Basic
Adult Growth and Parent Education (AGAPE)	Cooking: Chinese Classical
Affirmative Action: A Practical Approach for Employers	Cooking: German
Aging Process	Cooking: Gourmet, the Easy Way
Air Conditioning Service	Cooking: Holiday
Alcohol and Drug Abuse	Cooking: Home Baking, Bread
Algebra	Cooking: Microwave
Art Activity for Young Children	Cooking: Natural Food (Menu Planning with Natural Foods)
Art History	Cooking: Protein without Meat
Art of Motivating and Leading People	Coronary Care and EKG
Assertiveness Training	Cardiopulmonary Resuscitation (CPR)
Auto Body Repair	CPR and Standard First Aid
Auto Tune-up	CPR Instructor's Course
Automotive Air Conditioning Service	Crafts
BASIC Programming, Introduction to	Credit and Collection Skills
Basketweaving	Creating Activities for Young Children
Basketweaving & Chair Caning	Creative Art
Batik and Japanese Art	Creative Techniques in Clay
Estimating for Construction Trades	Crewel and Crossstitch
Blueprint Reading and Measuring Instruments	Crewel Embroidery
Blueprint Reading Residential	Crochet Lace
Bricklaying	Crocheting
Building a Child's Self-Concept	Current Events
Business Law	Cultural Awareness in Child Development
Business Letter Writing	Data Processing
Business Math	Death and Dying
Cabinet Making	Decorative Tole Painting
Cake Decorating	Decoupage
Calligraphy	Diabetes Care
Candlewicking	Dollmaking (Porcelain & Ceramic)
Cardiology, Basic	Dollmaking (Soft Sculpture)
Career and Life Planning	Drafting, Mechanical and Sketching I
Ceramics	Drafting, Sheet Metal
Child Abuse	Drawing, Freehand
Child Psychology	Economics for Business and Industry
Childhood-The Enchanting Years	Effectiveness Training for Women
Choral Music and Voice	Electrical Apprenticeship I, II, III, IV
Chore Provider	Electrical Code, National
Cognitive Development for Young Children	Electricity, Basic
Commercial Art	Electrocardiology for Nurses (EKG)
	Electronics

Electronics, Electrical Fundamentals	Japanese I, II
Emergency Care Skills for Occupational Health Nurse	Journalism
Emergency Medical Technician (EMT)	Knitting
EMT Coordinator Workshop	Labor Laws for Supervisors
EMT Recertification	Lampshade Making and Decorating
Employee Guidance and Counseling	Landscaping
English as a Second Language	Law for Consumer Protection
English Review for Secretaries	Leadership for Nurses
Exploratory Art	Legal Aspects of Nursing
Family and the Handicapped Child	LPN Refresher
Family Budgeting	Machine Shop Practice I, II, III
Family Dynamics	Macrame
Financial Analysis for Small Businessmen	Major Home Appliance Repair
Financial Management-Where Does Your Money Go?	Management, Principles of
Fire Apparatus Practices	Managing Time
Firefighting Procedures	Marketing, Principles of
First Aid	Marriage and the Family
First Aid Standard and CPR	Medical Terminology
Flower Arranging	Menu Planning and Buying
Food Service Worker	Metric Conversions
French Conversation I, II	Millinery (Hat Making)
Gardening: Flowers	Mixed Media Painting
Gardening: Vegetables	Modeling
GED Preparation	Needle Art
Geometry	Newspaper in Education (NIE)
Geriatric Nursing	Notary Public Education
German Conversation I, II	Nursing Assistant I
Greenhouse Management	Nursing Assistant II
Ground School, Instrument Pilot	Nutrient Environment for Infant and Toddler Development
Ground School, Private Pilot	Nutrient and Weight Loss
Guitar	Nutrition Education
Home Health, Basic	Nutrition for Improved Health
Homemaker-Home Health Aid	Office Supervision
Hose Practices	Offset Camera I
Hospital Ward Clerk/Unit Secretary	Offset Camera II
How to Build a House (Lecture)	Offset Printing
How to Get Along with Your Child	Oil and Gas Burner Service
Human Relations in Business and Industry	Oil Painting
Human Relations	Old Trunk Restoration
Human Resources Development	Oriental Brush Stroke
Human Psychology	Pastels
Income Tax, Personal	Pen and Ink
Industrial Fire Protection	Personnel Accreditation Preparation
Insight Into Dealing with the Cancer Patient	Pharmacology Refresher
Instructor Training	Photography I, II, III, IV
Interior Decorating	Photomaking: Film making in Super 8/16 mm
Investments/Stock Market	Physical and Language Development Programs for Handicapped Children
Italian I, II	Physical and Mental Health Screening
IV Fluids and Electrolyte Balance	Pillow Finishing
	Pine Needle-Baskets and Crafts

Planning for a Successful Career	Skills for Pre-School Teachers
Plaster Crafting	Small Business and the Federal Bankruptcy Act
Plumbing Code Regulations	Small Business Marketing Skills
Portraits, Charcoal	Small Engine Repair
Portraits, Oil	Smocking
Portraits, Pastel	Sociological Aspects of Aging or Social Gerontology
Preparation for Parenthood	Sociology of Juvenile Delinquency
Problem Solving and Decision Making	Spanish Conversation I, II, III
Professional Retail Salesmanship	Speaking, Public
Provisions for Exceptional Children	Speed Reading
Psychological Development of Pre-School Children	Stained Glass
Psychology, Adolescent	Starting You Own Business
Psychology of Aging	Step-Families—Yours, Mine, Ours
Psychology of Astrology	Stress Management
Psychology of Life and Work	Successful Advertising for Small Business
Psychology, Social	Supervision, Principles of
Quality Control	Surveying
Quilting	Swedish Weaving (Embroidery)
Quilting, Advanced	T-Shirt Painting
Quilting, Boutique	Tattooing
Radio Repair	Teacher Certificate Renewal Courses
Real Estate Exam Preparation, Brokers	Teaching for Independence in Young Children
Real Estate Exam Preparation, Salesmen	Television Repair
Real Estate, Math	Time and Motion Study
Refrigeration Service I, II	Time Management
Religion: The Early Christian Church	Transactional Analysis
Residential Management	Travel and Tourism Occupations
Residential Wiring	Typing I, II
R.N. Refresher	Upholstery
Role of the Day Care Teacher	Wallpaper Hanging
Safety Management	Wastewater Treatment Plant Operators Training
Sculpture, Clay	Watercolor I, II
Secretarial Procedures	Weaving
Self-Defense: Unarmed	Weight Control Through Habit, Not Diet
Sewing: Advanced (Fitting I, II)	Welding, Basic Oxyacetylene
Sewing: Bedspread Making	Welding, Basic Arc
Sewing: Clothing Construction I, II	Welding, Gas Metal Arc (MIG)
Sewing: Drapery Making	Welding, Inert Gas (TIG and MIG)
Sewing: Men's and Ladies' Jackets	Welding, Introduction to Nuclear Pipe
Sewing: Millinery (Hat Making)	Welding, Introduction to Pipe
Sewing: Novelties with Ultrasuede	Wills, Trust, Probate
Sewing: Pattern Drafting II	Woodcarving
Sewing: Pillow Finishing	Woodworking I, Power Tools
Sewing: Stretch Fabrics and Lingerie	Woodworking II, Cabinet Making
Sewing: Tailoring (Custom)	Word Processing
Sewing: Tailoring (Modified and Simulated Suede)	Writing, Creative
Sheet Metal Layout and Fabrication I, II, III	
Shop Math	
Shorthand, Gregg I, II	
Shorthand, Gregg Refresher	
Shorthand, Speedwriting I, II	
Sign Language I, II	



ASSOCIATE IN APPLIED SCIENCE DEGREE PROGRAM

The curricula described on the following pages are technical in nature. Upon completion of a curriculum, the graduate will be awarded the Associate in Applied Science degree. This degree is recognized nationally to indicate the successful completion of two years of education beyond the high school level.

The listing of courses for each curriculum is shown in the proper sequence; consequently, applicants should plan to attend 21 or 24 consecutive months.

The College's purpose is to offer the technical courses which will prepare the graduate for immediate employment opportunities. Therefore, the ability to transfer to other institutions of higher education, and to transfer credit earned, will be determined by the receiving institution.

SAMPLE COURSE LISTING

			C	L	P	QH
			(or CE)			
ENG	102	COMPOSITION	3	0	0	3
Course Prefix	Course Number	Course Title	Classroom Hours per week	Laboratory Hours per week	Practicum per week (Practical application or clinical experience per week)	Quarter Hours Credit

Contact Hours per week

ACCOUNTING T-016

CURRICULUM DESCRIPTION:

The purpose of the Accounting curriculum is to prepare the individual to enter the accounting profession through study of accounting principles, theories and practices with related study in law, finance, management and data processing operations.

The curriculum is designed to prepare the individual for entry-level accounting positions such as junior accountant, bookkeeper, accounting clerk, cost clerk, payroll clerk and related data processing occupations.

With experience and additional education, the individual will be able to advance to positions such as systems accountant, cost accountant, budget accountant and property accountant.

JOB OPPORTUNITIES:

Entry Level

Accountant

Estimator

Bookkeeper I

Bookkeeping-Machine Operator I

Accounting Clerk

Advanced Level

Budget Accountant

Cost Accountant

Property Accountant

Systems Accountant

Bookkeeper II

Bookkeeping-Machine Operator II

TOTAL CREDIT HOURS: 119

CURRICULUM BY QUARTERS:

Course Title

Hours Per Week

C	L	P	QH
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FIRST QUARTER

BUS 102	Keyboarding	3	2	0	4
MAT 119	Principles of Mathematics	5	0	0	5
BUS 120	Accounting I	4	0	3	5
ENG 100	Oral Communication	3	0	0	3
		15	2	3	17

SECOND QUARTER

BUS 121	Accounting II	4	0	3	5
ECO 151	Macroeconomics	5	0	0	5
EDP 101	Principles of Business Data Processing	3	2	0	4
ENG 101	Introduction to Written Communication	3	0	0	3
		15	2	3	17

THIRD QUARTER

BUS 122	Accounting III	4	0	3	5
BUS 210	Business Statistics	5	0	0	5
BUS 229	Taxes	2	0	3	3
EDP 103	Introduction to Microcomputing DOS	3	0	0	3
ENG 102	Composition	3	0	0	3
		17	0	6	19

FOURTH QUARTER

BUS 109	Business Math	5	0	0	5
BUS 115	Business Law I	3	0	0	3
BUS 221	Intermediate Accounting I	5	0	0	5
BUS 230	Advanced Taxes	2	0	3	3
		15	0	3	16

FIFTH QUARTER

BUS 116	Business Law II	3	0	0	3
BUS 222	Intermediate Accounting II	5	0	0	5
BUS 280	Microcomputer Accounting Applications: General Ledger	3	0	0	3
EDP 152	Financial Spreadsheet Operations I	3	0	0	3
ENG 205	Report Writing	3	0	0	3
		17	0	0	17

SIXTH QUARTER

BUS 225	Managerial Cost Accounting I	3	2	0	4
BUS 227	Intermediate Accounting III	5	0	0	5
BUS 269	Auditing I	3	2	0	4
ENG 206	Communications	3	0	0	3
		14	4	0	16

SEVENTH QUARTER

BUS 224	Advanced Accounting	3	2	0	4
BUS 226	Managerial Cost Accounting II	3	2	0	4
BUS 270	Auditing II	3	2	0	4
PSY 206	Applied Psychology	3	0	0	3
		12	6	0	15

In addition to the required curriculum courses, each student will be required to complete an additional two (2) courses for a minimum of two (2) credit hours in order to receive the A.A.S. degree. These courses will be designated as unrestricted electives and must be chosen from disciplines outside the student's areas of specialization.

ADMINISTRATIVE OFFICE TECHNOLOGY T-030

CURRICULUM DESCRIPTION:

This curriculum prepares individuals to perform secretarial and administrative support duties in a variety of offices including those offices with computerized, automated functions.

Students in this curriculum study keyboarding and word/information processing to develop skills in the preparation of business correspondence, reports, statistical copy, manuscripts and business forms. Administrative support courses emphasize typical office tasks such as scheduling appointments, composing correspondence and performing reprographic duties. Training is also provided in analyzing and coordinating office duties and systems. Skills and knowledge are taught in the areas of electronic document storage and retrieval and computer software utilization.

Graduates of the curriculum may be employed in offices in private business establishments involved in retailing, marketing, advertising, and manufacturing as well as offices in local, state, and federal government.

JOB OPPORTUNITIES:

Entry Level

Secretary
Stenographer
Data Typist
Typist
Office Clerk
Word Processing Correspondence Specialist
Word Processing Typist
Word Processing Administrative Secretary
Receptionist

Advanced Level

Administrative Secretary
Transcribing Operator Supervisor
Word Processing Supervisor

TOTAL CREDIT HOURS: 118

CURRICULUM BY QUARTERS:

Course Title

Hours Per Week

C	L	P	QH
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FIRST QUARTER

BUS 102	Keyboarding	3	2	0	4
BUS 128	Personal Financial Management	5	0	0	5
EDP 103	Introduction to Microcomputing DOS	3	0	0	3
ENG 100	Oral Communication	3	0	0	3
MAT 119	Principles of Mathematics	5	0	0	5
		19	2	0	20

SECOND QUARTER

BUS 103	Document Formatting	3	2	0	4
BUS 109	Business Mathematics	5	0	0	5
BUS 113	Vocabulary/Terminology I	3	0	0	3
BUS 240	Introductory Word Processing on Microcomputers	2	0	3	3
ENG 101	Introduction to Written Communication	3	0	0	3
		16	2	0	18

THIRD QUARTER

BUS 104	Document Production/Word Processing	3	2	0	4
BUS 114	Vocabulary/Terminology II	3	0	0	3
BUS 115	Business Law I	3	0	0	3
ENG 102	Composition	3	0	0	3
PSY 112	Personality Development	3	0	0	3
		15	2	0	16

FOURTH QUARTER

BUS 106	Shorthand I	3	2	0	4
OR					
BUS 112	Machine Transcription I	3	2	0	4
BUS 105	Advanced Word Processing Applications	3	2	0	4
BUS 211	Reprographics	2	0	3	3
ENG 205	Report Writing	3	0	0	3
		11	4	3	14

FIFTH QUARTER

BUS 107	Shorthand II	3	2	0	4
OR					
BUS 212	Machine Transcription II	3	2	0	4
BUS 118	Secretarial Accounting I	4	0	3	5
EDP 101	Principles of Business Data Processing	3	2	0	4
EDP 150	Data Base Management Systems I	3	0	0	3
ENG 206	Communications	3	0	0	3
		16	4	3	19

SIXTH QUARTER

BUS 108	Shorthand III	3	2	0	4
OR					
BUS 215	Machine Transcription III	3	2	0	4
BUS 119	Secretarial Accounting II	4	0	3	5
BUS 214	Administrative Office Procedures	5	0	0	5
BUS 250	Word Processing	1	4	0	3
		13	6	3	17

SEVENTH QUARTER

BUS 206	Dictation/Transcription	2	0	3	3
OR					
BUS 280	Microcomputer Accounting Applications: General Ledger	3	0	0	3
BUS 272	Principles of Supervision	3	0	0	3
EDP 152	Financial Spreadsheet Operations I	3	0	0	3
EDP 173	Desktop Publishing I	3	0	0	3
		12	0	0	12
OR					
		11	0	3	12

In addition to the required curriculum courses, each student will be required to complete an additional two (2) courses for a minimum of two (2) credit hours in order to receive the A.A.S. degree. These courses will be designated as unrestricted electives and must be chosen from disciplines outside the student's areas of specialization.

ARCHITECTURAL TECHNOLOGY T-041

CURRICULUM DESCRIPTION:

The Architectural Technology curriculum provides individuals with knowledge and skills that will lead to employment and advancement in the field of architectural technology. Technical courses are included which will enable the graduate to advance into related areas of work as job experience is obtained or to continue toward an advanced degree in an associated field of technology.

Architectural technicians translate the architect's design sketches into complete and accurate plans and drawings for construction purposes. The technician will be involved in work requiring a knowledge of drafting, construction materials, mechanical and structural systems, estimating, building codes, and specifications.

Initial employment opportunities exist with architectural and engineering firms, private utilities, contractors, and municipal governments.

JOB OPPORTUNITIES:

Architectural and Construction Related Drafting Technician

Building Code Inspector

Estimator

Field Inspector (Buildings)

Construction Supervisor

Delineator

Model Builder

Building Materials Sales Representative

TOTAL CREDIT HOURS: 119

CURRICULUM BY QUARTERS:

Course Title

Hours Per Week

C L P QH

FIRST QUARTER

ARC 106	Architectural Drafting I	2	0	6	4
ARC 181	History of Architecture and Construction	5	0	0	5
CAD 151	Computer Graphics	2	2	0	3
MAT 101	Technical Mathematics I	5	0	0	5
		14	2	6	17

SECOND QUARTER

ARC 105	Architectural Materials and Methods	3	0	0	3
ARC 107	Architectural Drafting II	2	0	6	4
CAD 152	Computer Aided Drafting I	1	0	3	2
ENG 101	Introduction to Written Communication	3	0	0	3
MAT 102	Technical Mathematics II	5	0	0	5
		14	0	9	17

THIRD QUARTER

ARC 108	Architectural Drafting III	0	0	9	3
ARC 109	Architectural Mechanical Equipment	3	0	3	4
CAD 153	Computer Aided Drafting II	2	2	0	3
MAT 103	Technical Mathematics III	5	0	0	5
PHY 111	Physics - Mechanics	3	2	0	4
		13	4	12	19

FOURTH QUARTER

ARC 150	Site Planning	2	0	6	4
CAD 154	Computer Aided Drafting III	1	2	0	2
ECO 102	Economics I	3	0	0	3
MEC 104	Applied Mechanics	5	0	0	5
PHY 113	Physics - Electricity	3	2	0	4
		14	4	6	18

FIFTH QUARTER

ARC 220	Architectural Drafting IV	2	0	9	5
ENG 102	Composition	3	0	0	3
MEC 205	Strength of Materials	3	2	0	4
PSY 206	Applied Psychology	3	0	0	3
		11	2	9	15

SIXTH QUARTER

ARC 221	Architectural Drafting V	2	0	9	5
ARC 235	Codes, Specifications, and Contract Documents	3	0	3	4
CAD 155	Computer Aided Drafting Applications	1	4	0	3
ENG 103	Technical Report Writing	3	0	0	3
		9	4	12	15

SEVENTH QUARTER

ARC 222	Architectural Drafting VI	2	0	9	5
ARC 236	Construction Estimating and Field Inspecting	3	0	3	4
ENG 100	Oral Communication	3	0	0	3
PHY 114	Physics - Light and Sound	3	2	0	4
		11	2	12	16

In addition to the required curriculum courses, each student will be required to complete an additional two (2) courses for a minimum of two (2) credit hours in order to receive the A.A.S. degree. These courses will be designated as unrestricted electives and must be chosen from disciplines outside the student's areas of specialization.

ASSOCIATE DEGREE NURSING T-059

CURRICULUM DESCRIPTION:

The Associate Degree Nursing curriculum is designed to prepare graduates to integrate the principles and theories of nursing and the sciences in utilizing the nursing process in the practice of nursing. The practice of nursing by associate degree nursing graduates consists of (1) assessing the patient's physical and mental health, including the patient's reaction to illness and treatment regimens; (2) recording and reporting the results of the nursing assessment; (3) planning, initiating, delivering, and evaluating appropriate nursing acts; (4) teaching, delegating to or supervising other personnel in implementing the treatment regimen; (5) collaborating with other health care providers in determining the appropriate health care for a patient; (6) implementing the treatment and pharmaceutical regimen prescribed by any person authorized by state law to prescribe such a regimen; (7) providing teaching and counseling about the patient's health care; (8) reporting and recording the plan for care, nursing care given, and the patient's response to that care; and (9) supervising, teaching, and evaluating those who perform or are preparing to perform nursing functions.

Graduates are eligible to take the National Council Licensure Examination (NCLEX-RN) which is required for practice as a registered nurse.

Individuals desiring a career in registered nursing should take biology, algebra, and chemistry courses prior to entering the program.

JOB OPPORTUNITIES:

Registered Nurse

TOTAL CREDIT HOURS: 121

CURRICULUM BY QUARTERS:

Course Title

Hours Per Week

C	L	CE	QH
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FIRST QUARTER

BIO 107	Anatomy and Physiology I	3	2	0	4
BUS 141	Medical Vocabulary and Terminology	3	0	0	3
NUR 119	Pharmacology	2	2	0	3
NUR 120	Medical-Surgical Nursing I	4	2	6	7
		12	6	6	17

SECOND QUARTER

BIO 108	Anatomy and Physiology II	3	2	0	4
NUR 122	Medical-Surgical Nursing II	5	2	6	8
NUT 101	General Nutrition and Diet Therapy	3	0	0	3
PSY 101	Psychology	3	0	0	3
		14	4	6	18

THIRD QUARTER

BIO 111	Microbiology	3	2	0	4
NUR 124	Medical-Surgical Nursing III	4	2	12	9
PSY 110	Lifespan Psychology	3	0	0	3
		10	4	12	16

FOURTH QUARTER

BIO 112	Pathology	3	0	0	3
ENG 101	Introduction to Written Communication	3	0	0	3
NUR 126	Medical-Surgical Nursing IV	5	0	12	9
PSY 111	Abnormal Behavior	3	0	0	3
		14	0	12	18

FIFTH QUARTER

ENG 102	Composition	3	0	0	3
NUR 225	Maternal/Newborn Nursing (1/2 quarter)	6	0	12	5
NUR 226	Nursing of Children (1/2 quarter)	6	0	12	5
OR		OR			
NUR 224	Psychiatric Nursing (1/2 quarter)	6	0	12	5
NUR 227	Care of the Older Adult (1/2 quarter)	6	0	12	5
SOC 103	Sociology	3	0	0	3
		18	0	24	16

SIXTH QUARTER

EDP 103	Introduction to Microcomputing DOS	3	0	0	3
ENG 103	Technical Report Writing	3	0	0	3
NUR 225	Maternal/Newborn Nursing (1/2 quarter)	6	0	12	5
NUR 226	Nursing of Children (1/2 quarter)	6	0	12	5
OR		OR			
NUR 224	Psychiatric Nursing (1/2 quarter)	6	0	12	5
NUR 227	Care of the Older Adult (1/2 quarter)	6	0	12	5
		18	0	24	16

SEVENTH QUARTER

NUR 200	Seminar	3	0	0	3
NUR 228	Advanced Medical-Surgical Nursing I	4	0	18	10
		7	0	18	13

EIGHTH QUARTER

NUR 229	Advanced Medical-Surgical Nursing II (1/2 quarter)	4	0	18	5
		4	0	18	5

In addition to the required curriculum courses, each student will be required to complete an additional two (2) courses for a minimum of two (2) credit hours in order to receive the A.A.S. degree. These courses will be designated as unrestricted electives and must be chosen from disciplines outside the student's areas of specialization.

*AUTOMATION/ROBOTICS TECHNOLOGY T-173

(formerly Electromechanical Technology)

CURRICULUM DESCRIPTION:

The Automation/Robotics curriculum is designed to prepare technicians to install, program, operate, maintain, service and repair automated manufacturing systems, including robots.

The course of study will include fundamentals of mechanical, electrical, and electronic technology with specific application of robots, controlling devices, and electromechanical equipment in automated manufacturing systems.

The graduate of this curriculum will be prepared for employment in industries that utilize robots and other electromechanical devices in automated manufacturing.

JOB OPPORTUNITIES:

Electromechanical Technician

Automation Technician

Automation/Robotics Technician

Manufacturing Systems Technician

TOTAL CREDIT HOURS: 128

CURRICULUM BY QUARTERS:

Course Title

Hours Per Week

C L P QH

FIRST QUARTER

CET 105 Computer Tools for Engineering
Technology I

0 0 3 1

ELC 101 Fundamentals of Electricity I

5 0 6 7

ENG 100 Oral Communication

3 0 0 3

MAT 101 Technical Mathematics I

5 0 0 5

13 0 9 16

SECOND QUARTER

CET 106 Computer Tools for Engineering
Technology II

0 0 3 1

ELC 102 Fundamentals of Electricity II

5 0 6 7

ENG 101 Introduction to Written Communication

3 0 0 3

MAT 102 Technical Mathematics II

5 0 0 5

13 0 9 16

THIRD QUARTER

ELN 110 Transistor Applications

5 2 6 8

ENG 102 Composition

3 0 0 3

MAT 103 Technical Mathematics III

5 0 0 5

PHY 111 Physics - Mechanics

3 2 0 4

16 4 6 20

FOURTH QUARTER

DFT 112	Drafting - Electromechanical	3	2	0	4
ELM 200	Mechanisms	3	0	3	4
ELN 210	Linear Integrated Circuits	5	2	6	8
PHY 112	Physics - Materials and Heat	3	2	0	4
		14	6	9	20

FIFTH QUARTER

ELM 210	Electromechanical Devices	4	0	6	6
ELM 215	Electrical Control Systems	5	0	6	7
ENG 103	Technical Report Writing	3	0	0	3
		12	0	12	16

SIXTH QUARTER

ELM 220	Automatic Control Systems I	4	0	3	5
ELN 219	Digital Fundamentals	5	0	6	7
MEC 230	Hydraulics and Pneumatics	3	2	0	4
PSY 206	Applied Psychology	3	0	0	3
		15	2	9	19

SEVENTH QUARTER

ECO 102	Economics I	3	0	0	3
ELM 230	Automatic Control Systems II	5	0	3	6
ELM 240	Electromechanical Troubleshooting	3	0	3	4
ELN 225	Computers and Microprocessors	4	0	6	6
		15	0	12	19

In addition to the required curriculum courses, each student will be required to complete an additional two (2) courses for a minimum of two (2) credit hours in order to receive the A.A.S. degree. These courses will be designated as unrestricted electives and must be chosen from disciplines outside the student's areas of specialization.

*Name change is pending State Board approval June, 1991.

BANKING AND FINANCE T-112

CURRICULUM DESCRIPTION:

The purposes of the Banking and Finance curriculum are (1) to prepare the individual to enter the banking and finance industry, (2) to provide an educational program for the banking employees wanting to receive the American Institute of Banking certificate, and (3) to provide an educational program to upgrade or retrain individuals presently employed in the banking or finance industry.

These purposes will be fulfilled through study in areas such as banking and finance principles, theories and practices; teller operations; lending and collections procedures, financial analysis, marketing, and public relations.

This curriculum will provide the opportunity for an individual to enter a variety of banking or finance jobs in retail banks, commercial banks, government lending agencies, mortgage banks, and credit companies.

JOB OPPORTUNITITES:

Entry Level

Accounting Clerk
Teller
General Clerk
Collector and Adjuster

Advanced Level

Branch Manager
Departmental Manager, Advertising
Departmental Manager, Budget
Departmental Manager, Personnel
and Training
Banking Staff Assistant

TOTAL CREDIT HOURS: 119

CURRICULUM BY QUARTERS:

Course Title

Hours Per Week

C L P QH

FIRST QUARTER

AIB 202	Principles of Banking	4	0	0	4
BUS 102	Keyboarding	3	2	0	4
ENG 100	Oral Communication	3	0	0	3
MAT 119	Principles of Mathematics	5	0	0	5
		15	2	0	16

SECOND QUARTER

AIB 209	Installment Credit	4	0	0	4
BUS 109	Business Mathematics	5	0	0	5
BUS 120	Accounting I	4	0	3	5
EDP 103	Introduction to Microcomputing DOS	3	0	0	3
ENG 101	Introduction to Written Communication	3	0	0	3
		19	0	3	20

THIRD QUARTER

AIB	236	Trust Functions and Services	4	0	0	4
BUS	115	Business Law I	3	0	0	3
BUS	121	Accounting II	4	0	3	5
ECO	102	Economics I	3	0	0	3
ENG	102	Composition	3	0	0	3
			17	0	3	18

FOURTH QUARTER

AIB	231	Savings and Time Deposit	4	0	0	4
BUS	116	Business Law II	3	0	0	3
BUS	122	Accounting III	4	0	3	5
ECO	104	Economics II	3	0	0	3
			14	0	3	15

FIFTH QUARTER

AIB	205	Bank Management	4	0	0	4
BUS	128	Personal Financial Management	5	0	0	5
ENG	205	Report Writing	3	0	0	3
PSY	206	Applied Psychology	3	0	0	3
			15	0	0	15

SIXTH QUARTER

AIB	203	Bank Investments	4	0	0	4
BUS	209	Real Estate Finance	5	0	0	5
BUS	229	Taxes	2	0	3	3
ENG	206	Communications	3	0	0	3
			14	0	3	15

SEVENTH QUARTER

AIB	235	Loan and Discount	3	0	0	3
AIB	239	Marketing for Bankers	4	0	0	4
BUS	210	Business Statistics	5	0	0	5
BUS	272	Principles of Supervision	3	0	0	3
BUS		Elective	3	0	0	3
			18	0	0	18

In addition to the required curriculum courses, each student will be required to complete an additional two (2) courses for a minimum of two (2) credit hours in order to receive the A.A.S. degree. These courses will be designated as unrestricted electives and must be chosen from disciplines outside the student's areas of specialization.

BUSINESS ADMINISTRATION T-018

CURRICULUM DESCRIPTION:

The Business Administration curriculum is designed to prepare an individual for entry into middle-management occupations in various businesses and industries. The curriculum provides an overview of the business and industrial world - its organization and management.

The purpose of the curriculum will be fulfilled through courses designed to develop competency in (1) understanding the principles of organization and management in business operations, (2) utilizing modern techniques to make decisions, (3) understanding the economy through study and analysis of the role of production and marketing, (4) communicating orally and in writing, and (5) interpersonal relationships.

Through these skills and through development of personal competencies and qualities, the individual will be able to function effectively in middle-management activities in business or industry.

JOB OPPORTUNITIES:

Entry Level

Purchasing Agent
Sales Manager
Public Relations Representative
Sales-Service Promoter
Training Representative
General Supervisor
Credit Card Operations Manager
Operations Officer
Loan Officer
Volunteer Services Supervisor
Customer Services Manager
Residence Supervisor

Advanced Level

Personnel Manager
Credit and Collection Manager
Customer Service Manager
Branch Manager
Production Superintendent
Traffic Manager
Credit Union Manager
Housing Project Manager
Market Manager
Loan Counselor
Office Manager
Department Manager
Warehouse Manager

TOTAL CREDIT HOURS: 116

CURRICULUM BY QUARTERS:

Course Title

Hours Per Week
C L P QH

FIRST QUARTER

BUS 101	Introduction to Business	5	0	0	5
BUS 102	Keyboarding	3	2	0	4
ENG 100	Oral Communication	3	0	0	3
MAT 119	Principles of Mathematics	5	0	0	5
		16	2	0	17

SECOND QUARTER

BUS 109	Business Mathematics	5	0	0	5
BUS 120	Accounting I	4	0	3	5
ECO 102	Economics I	3	0	0	3
ENG 101	Introduction to Written Communication	3	0	0	3
		15	0	3	16

THIRD QUARTER

BUS 115	Business Law I	3	0	0	3
BUS 121	Accounting II	4	0	3	5
ECO 104	Economics II	3	0	0	3
EDP 101	Principles of Business Data Processing	3	2	0	4
ENG 102	Composition	3	0	0	3
		16	2	3	18

FOURTH QUARTER

BUS 116	Business Law II	3	0	0	3
BUS 122	Accounting III	4	0	3	5
BUS 229	Taxes	2	0	3	3
BUS 239	Marketing	5	0	0	5
EDP 103	Introduction to Microcomputing DOS	3	0	0	3
		17	0	6	19

FIFTH QUARTER

BUS 128	Personal Financial Management	5	0	0	5
BUS 232	Sales Development	3	0	0	3
ENG 205	Report Writing	3	0	0	3
PSY 206	Applied Psychology	3	0	0	3
		14	0	0	14

SIXTH QUARTER

BUS 245	Advertising Using Desktop Graphics	3	2	0	4
BUS 280	Microcomputing Accounting Applications: General Ledger	3	0	0	3
EDP 152	Financial Spreadsheet Operations I	3	0	0	3
ENG 206	Communications	3	0	0	3
BUS	Elective	3	0	0	3
		15	2	0	16

SEVENTH QUARTER

BUS 235	Business Management	5	0	0	5
BUS 272	Principles of Supervision	3	0	0	3
BUS	Electives	6	0	0	6
		14	0	0	14

In addition to the required curriculum courses, each student will be required to complete an additional two (2) courses for a minimum of two (2) credit hours in order to receive the A.A.S. degree. These courses will be designated as unrestricted electives and must be chosen from disciplines outside the student's areas of specialization.

BUSINESS COMPUTER PROGRAMMING T-022

CURRICULUM DESCRIPTION:

The primary objective of the Business Computer Programming curriculum is to prepare individuals for gainful employment as computer programmers. The objective is fulfilled through study and application in areas such as computer and systems theories and concepts, data processing techniques, business operations, logic, programming procedures and languages, and types, uses and operation of equipment.

Entry-level jobs as computer programmer and computer programmer trainee are available. With experience and additional education, the individual may enter jobs such as data processing manager, computer programmer manager, systems analyst and systems manager.

JOB OPPORTUNITIES:

Entry Level

Computer Programmer
Computer Programmer Trainee
Information Systems Programmer
Process Control Programmer
Detail Programmer

Advanced Level

Data Processing Manager/Supervisor
Computer Operations Manager/Supervisor
Chief Business Programmer
Data Processing Programmer/Analyst

TOTAL CREDIT HOURS: 117

CURRICULUM BY QUARTERS:

Course Title		Hours Per Week			
		C	L	P	QH
FIRST QUARTER					
BUS 100	Basic Keyboarding	3	0	0	3
MAT 119	Principles of Mathematics	5	0	0	5
EDP 100	Introduction to Data Processing	3	2	0	4
EDP 107	Logic and Decision Making I	3	0	0	3
		14	2	0	15
SECOND QUARTER					
EDP 105	Assembly Language Programming I	5	2	0	6
EDP 108	Logic and Decision Making II	3	0	0	3
ENG 100	Oral Communication	3	0	0	3
MAT 117	EDP Mathematics	5	0	0	5
		16	2	0	17

THIRD QUARTER

BUS 120	Accounting I	4	0	3	5
BUS 210	Business Statistics	5	0	0	5
EDP 110	COBOL Programming I	3	2	0	4
ENG 101	Introduction to Written Communication	3	0	0	3
		15	2	3	17

FOURTH QUARTER

BUS 121	Accounting II	4	0	3	5
EDP 111	COBOL Programming II	3	2	0	4
EDP 201	Computer Systems	3	2	0	4
EDP 245	UNIX Operating System	3	2	0	4
		13	6	3	17

FIFTH QUARTER

EDP 112	COBOL Programming III	3	2	0	4
EDP 205	Systems Analysis and Design	3	2	0	4
EDP 230	Introduction to FORTRAN	3	2	0	4
ENG 102	Composition	3	0	0	3
		12	6	0	15

SIXTH QUARTER

EDP 106	Assembly Language Programming II	4	2	0	5
EDP 208	Advanced Programming	3	2	0	4
EDP 260	EDP Microcomputing	3	2	0	4
ENG 206	Communications	3	0	0	3
PSY 206	Applied Psychology	3	0	0	3
		16	6	0	19

SEVENTH QUARTER

EDP 220	Research Project	3	2	0	4
EDP 242	C Programming Language	3	2	0	4
EDP 270	RPG II Programming	3	2	0	4
ENG 205	Report Writing	3	0	0	3
		12	6	0	15

In addition to the required curriculum courses, each student will be required to complete an additional two (2) courses for a minimum of two (2) credit hours in order to receive the A.A.S. degree. These courses will be designated as unrestricted electives and must be chosen from disciplines outside the student's areas of specialization.

COMPUTER ENGINEERING TECHNOLOGY T-040

CURRICULUM DESCRIPTION:

This program is intended to provide the skills required to install, service and maintain computers, microprocessor and computer controlled equipment and computer peripheral devices.

The curriculum provides training in both the hardware and software areas of the computer field.

A sequence of introductory hardware courses provides the student with a strong background in physics, technical mathematics, electricity, electronics, and digital logic circuits and concepts. Advanced course work provides a detailed study of the logic of the central processing unit, the operation of integrated circuits in the central processing unit, the operation and use of integrated circuit memory devices and the interfacing of the central processing unit to memory devices. Additional studies cover interfacing the central processing unit to external devices using both serial and parallel data transfer, the operation of large scale integration programmable interface units and their interfacing with the central processing unit, and the operation of computer peripheral devices such as video displays, printers, floppy disk storage systems, magnetic tape units, keyboards and the techniques of converting signal between the analog and digital forms.

The programming course work provides a sequence of study stressing good program design techniques, structured programming and program documentation. Rather than being familiar with a large number of programming languages, the student is expected to learn well a highly structured language, such as Pascal, and an assembly language. The importance of assembly language to the understanding of the operation of the central processing unit and the related computer units is stressed. Computer operating system concepts are discussed to provide a unified view of the hardware and software aspects of the computer system.

JOB OPPORTUNITIES:

Computer Service Technician
Electronic Computer Mechanic
Electronic Systems Mechanic

TOTAL CREDIT HOURS: 126

CURRICULUM BY QUARTERS:

Course Title

Hours Per Week

C L P QH

FIRST QUARTER

CET 105 Computer Tools for Engineering
Technology I
ELC 101 Fundamentals of Electricity I
ENG 100 Oral Communication
MAT 101 Technical Mathematics I

0	0	3	1
5	0	6	7
3	0	0	3
5	0	0	5
13	0	9	16

SECOND QUARTER

CET 106	Computer Tools for Engineering Technology II	0	0	3	1
ELC 102	Fundamentals of Electricity II	5	0	6	7
ENG 101	Introduction to Written Communication	3	0	0	3
MAT 102	Technical Mathematics II	5	0	0	5
		13	0	9	16

THIRD QUARTER

ELN 110	Transistor Applications	5	2	6	8
ENG 102	Composition	3	0	0	3
MAT 103	Technical Mathematics III	5	0	0	5
PHY 111	Physics - Mechanics	3	2	0	4
		16	4	6	20

FOURTH QUARTER

CET 160	Assembly Language Programming	3	0	3	4
ELN 210	Linear Integrated Circuits	5	2	6	8
ELN 219	Digital Fundamentals	5	0	6	7
		13	2	15	19

FIFTH QUARTER

CET 200	Microprocessors	4	0	6	6
ELN 235	Industrial Electronics I	5	0	6	7
ENG 103	Technical Report Writing	3	0	0	3
PSY 112	Personality Development	3	0	0	3
		15	0	12	19

SIXTH QUARTER

CET 215	Mini-Computer Maintenance I	4	0	6	6
CET 220	Microprocessor Interfacing	4	0	6	6
PHY 114	Physics - Light and Sound	3	2	0	4
		11	2	12	16

SEVENTH QUARTER

CET 225	Mini-Computer Maintenance II	4	0	6	6
CET 232	Computer Peripherals	4	0	6	6
CET 242	Concepts of Computer Networking and Data Communications	2	0	3	3
ECO 102	Economics I	3	0	0	3
		13	0	15	18

In addition to the required curriculum courses, each student will be required to complete an additional two (2) courses for a minimum of two (2) credit hours in order to receive the A.A.S. degree. These courses will be designated as unrestricted electives and must be chosen from disciplines outside the student's areas of specialization.

EARLY CHILDHOOD ASSOCIATE T-073

CURRICULUM DESCRIPTION:

The Early Childhood Associate curriculum prepares individuals to work with programs and/or centers concerned with the care and development of infants and young children. Through study and application in such areas as child growth and development, physical and nutritional needs of children, care and guidance of children, and communication with children and their parents, individuals will be able to function effectively in various programs and/or centers dealing with preschool children.

Job opportunities are available in such areas as day care centers, nursery schools, kindergartens, child development centers, hospitals, rehabilitation clinics, evaluation clinics, camps, and recreational centers.

JOB OPPORTUNITIES:

Entry Level

Child Care Worker
Day Care Worker
Child Care Assistant
Professional Nanny

Advanced Level

Director, Day Care
Director, Preschool

TOTAL CREDIT HOURS: 112

CURRICULUM BY QUARTERS:

Course Title

Hours Per Week

C	L	P	QH
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FIRST QUARTER

EDU 101	Child Growth and Development	6	0	0	6
ENG 100	Oral Communication	3	0	0	3
HEA 102	Personal Health	5	0	0	5
PSY 102	General Psychology	5	0	0	5
		19	0	0	19

SECOND QUARTER

EDU 102	Programs for Young Children	4	2	0	5
EDU 107	Communication with Young Children	3	2	0	4
ENG 101	Introduction to Written Communication	3	0	0	3
MAT 118	General Mathematics	3	0	0	3
PSY 205	Child Psychology	3	0	0	3
		16	4	0	18

THIRD QUARTER

EDU 103	Working with Young Children	4	0	10	5
ENG 102	Composition	3	0	0	3
HEA 113	Health and Safety for Young Children	3	2	0	4
SCI 101	General Science	3	0	0	3
		13	2	10	15

FOURTH QUARTER

EDU 104	Art for Young Children	3	0	0	3
EDU 108	Social Studies in Early Childhood	3	0	0	3
EDU 110	Instructional Media and Resources	2	0	3	3
EDU 112	Language Arts in Early Childhood	3	0	0	3
ENG 207	Educational Report Writing	3	0	0	3
		14	0	3	15

FIFTH QUARTER

EDU 105	Music and Creative Movement for Young Children	3	0	0	3
EDU 106	Activities for Young Children: Science and Math	5	0	10	6
ENG 116	Children's Literature	3	0	0	3
SOC 103	Sociology	3	0	0	3
		14	0	10	15

SIXTH QUARTER

EDU 109	Physical Activities: Games for Young Children	1	2	0	2
EDU 202	Seminar Co-op in Early Childhood	5	0	10	6
EDU 203	The Exceptional Child	3	0	0	3
SOC 105	Families in the American Culture	3	0	0	3
		12	2	10	14

SEVENTH QUARTER

EDU 206	Special Problems (or EDU electives)	2	0	0	2
EDU 204	Parent Education	3	0	0	3
EDU 211	Early Childhood Internship	4	0	20	6
EDU 271	Child Care Administration	3	0	0	3
		12	0	20	14

ELECTIVES

EDU 230	Issues in Early Childhood: Discipline	1	0	0	1
EDU 232	Programming for Infants: A Guide to Very Early Childhood Education	1	0	0	1
EDU 233	Issues in Early Childhood: Infant Feeding	1	0	0	1
EDU 234	Issues in Early Childhood: Child Abuse and Neglect	1	0	0	1
EDU 235	Issues in Early Childhood: School Age Child Care	1	0	0	1

In addition to the required curriculum courses, each student will be required to complete an additional two (2) courses for a minimum of two (2) credit hours in order to receive the A.A.S. degree. These courses will be designated as unrestricted electives and must be chosen from disciplines outside the student's areas of specialization.

ELECTRONICS ENGINEERING TECHNOLOGY T-045

CURRICULUM DESCRIPTION:

The Electronics Engineering Technology curriculum provides a basic background in electronic-related theory, with practical applications of electronics for business and industry. Courses are designed to develop competent electronics technicians who may work as assistants to engineers or as liaisons between engineers and skilled craftspersons.

The electronics technician will start in one or more of the following areas: research, design, development, production, maintenance, or sales. The graduate may begin as an electronics technician, an engineering aide, laboratory technician, supervisor, or equipment specialist.

JOB OPPORTUNITIES:

Electronics Technician

Electrical Tester

Electronics Engineering Technician

Electronics Mechanic

Electronics Sales and Service Technician

TOTAL CREDIT HOURS: 121

CURRICULUM BY QUARTER:

Course Title

Hours Per Week

C L P QH

FIRST QUARTER

CET 105	Computer Tools for Engineering Technology I	0	0	3	1
ELC 101	Fundamentals of Electricity I	5	0	6	7
ENG 100	Oral Communication	3	0	0	3
MAT 101	Technical Mathematics I	5	0	0	5
		13	0	9	16

SECOND QUARTER

CET 106	Computer Tools for Engineering Technology II	0	0	3	1
ELC 102	Fundamentals of Electricity II	5	0	6	7
ENG 101	Introduction to Written Communication	3	0	0	3
MAT 102	Technical Mathematics II	5	0	0	5
		13	0	9	16

THIRD QUARTER

ELN 110	Transistor Applications	5	2	6	8
ENG 102	Composition	3	0	0	3
MAT 103	Technical Mathematics III	5	0	0	5
PHY 111	Physics - Mechanics	3	2	0	4
		16	4	6	20

FOURTH QUARTER

ELN 210	Linear Integrated Circuits	5	2	6	8
MAT 201	Technical Mathematics IV	5	0	0	5
PHY 112	Physics - Materials and Heat	3	2	0	4
		13	4	6	17

FIFTH QUARTER

ELN 219	Digital Fundamentals	5	0	6	7
ELN 235	Industrial Electronics I	5	0	6	7
ENG 103	Technical Report Writing	3	0	0	3
		13	0	12	17

SIXTH QUARTER

ELN 236	Industrial Electronics II	4	0	6	6
ELN 247	Electronic Systems: Computers	4	0	6	6
PSY 206	Applied Psychology	3	0	0	3
		11	0	12	15

SEVENTH QUARTER

ECO 102	Economics I	3	0	0	3
ELN 245	Electronic Design Project	2	0	6	4
ELN 248	Microprocessor Interfacing	5	0	6	7
PHY 114	Physics - Light and Sound	3	2	0	4
		13	2	12	18

In addition to the required curriculum courses, each student will be required to complete an additional two (2) courses for a minimum of two (2) credit hours in order to receive the A.A.S. degree. These courses will be designated as unrestricted electives and must be chosen from disciplines outside the student's areas of specialization.

ELECTRONICS ENGINEERING TECHNOLOGY T-045

Evening Curriculum

CURRICULUM DESCRIPTION:

The Electronics Engineering Technology curriculum provides a basic background in electronics-related theory, with practical applications of electronics for business and industry. Courses are designed to develop competent electronics technicians who may work as assistants to engineers or as liaisons between engineers and skilled craftspersons.

The electronics technician will start in one or more of the following areas: research, design, development, production, maintenance, or sales. The graduate may begin as an electronics technician, an engineering aide, laboratory technician, supervisor, or equipment specialist.

JOB OPPORTUNITIES:

Electronics Technician

Electrical Tester

Electronics Engineering Technician

Electronics Mechanic

Electronics Sales and Service Technician

TOTAL CREDIT HOURS: 121

CURRICULUM BY QUARTERS:

Course Title

Hours Per Week

C L P QH

FIRST QUARTER

CET 105 Computer Tools for Engineering
Technology I

0 0 3 1

ELC 101 Fundamentals of Electricity I

5 0 6 7

MAT 101 Technical Mathematics I

5 0 0 5

10 0 9 13

SECOND QUARTER

CET 106 Computer Tools for Engineering
Technology II

0 0 3 1

ELC 102 Fundamentals of Electricity II

5 0 6 7

MAT 102 Technical Mathematics II

5 0 0 5

10 0 9 13

THIRD QUARTER

ELN 110 Transistor Applications

5 2 6 8

MAT 103 Technical Mathematics III

5 0 0 5

10 2 6 13

FOURTH QUARTER

ELN 210	Linear Integrated Circuits	5	2	6	8
MAT 201	Technical Mathematics IV	5	0	0	5
		10	2	6	13

FIFTH QUARTER

ELN 235	Industrial Electronics I	5	0	6	7
ENG 100	Oral Communication	3	0	0	3
PHY 111	Physics - Mechanics	3	2	0	4
		11	2	6	14

SIXTH QUARTER

ELN 236	Industrial Electronics II	4	0	6	6
PHY 112	Physics - Materials and Heat	3	2	0	4
		7	2	6	10

SEVENTH QUARTER

ELN 219	Digital Fundamentals	5	0	6	7
PHY 114	Physics - Light and Sound	3	2	0	4
		8	2	6	11

EIGHTH QUARTER

ELN 247	Electronic Systems: Computers	4	0	6	6
ENG 101	Introduction to Written Communication	3	0	0	3
		7	0	6	9

NINTH QUARTER

ELN 248	Microprocessor Interfacing	5	0	6	7
ENG 102	Composition	3	0	0	3
PSY 206	Applied Psychology	3	0	0	3
		11	0	6	13

TENTH QUARTER

ECO 102	Economics I	3	0	0	3
ELN 245	Electronic Design Project	2	0	6	4
ENG 103	Technical Report Writing	3	0	0	3
		8	0	6	10

In addition to the required curriculum courses, each student will be required to complete an additional two (2) courses for a minimum of two (2) credit hours in order to receive the A.A.S. degree. These courses will be designated as unrestricted electives and must be chosen from disciplines outside the student's areas of specialization.

HORTICULTURE TECHNOLOGY T-009

CURRICULUM DESCRIPTION:

The Horticulture Technology curriculum encompasses the study and practical application of a variety of subjects in the field of horticulture. The curriculum consists of identifying and selecting plant materials; propagating, planting, and growing plants; designing basic landscapes and planting materials at the appropriate places and in the correct manner; properly maintaining plant materials; and managing the nursery, greenhouse, and garden center. In addition, skills are developed in designing and building planters, walks, patios, fences and other landscape features. The curriculum is designed to provide students with the knowledge, skills, and attitudes that are necessary for independent, creative thinking essential to success in this field.

Various types of employers hire the graduates of this curriculum. Examples are nurseries, greenhouse operations, garden centers, landscape contractors, landscape maintenance companies, and municipal governmental agencies.

JOB OPPORTUNITIES:

Entry Level

Landscape Worker
Nursery Worker
Plant Propagator
Tree Pruner
Groundskeeper
Greenhouse Worker
Salesperson, Horticultural
and Nursery Products
Landscape Construction Worker
Garden Center Worker
Lawn-Service Worker

Advanced Level

Horticulture - Specialty
Grower, Field
Horticulture - Specialty
Grower, Inside
Landscape Gardener
Nursery Management
Greenhouse Superintendent
Landscape Drafter

TOTAL CREDIT HOURS: 116

CURRICULUM BY QUARTERS:

Course Title

Hours Per Week

C L P QH

FIRST QUARTER

ENG 100 Oral Communication
HRT 150 Interior Plant
HRT 170 Plant Science
HRT 185 Soil Science and Fertilizer

3	0	0	3
3	0	0	3
4	2	0	5
5	2	0	6
15	4	0	17

SECOND QUARTER

ENG 101	Introduction to Written Communication	3	0	0	3
HRT 153	Greenhouse Management	3	2	0	4
HRT 254	Plant Propagation	3	2	0	4
PSY 206	Applied Psychology	3	0	0	3
		12	4	0	14

THIRD QUARTER

ENG 102	Composition	3	0	0	3
HRT 140	Home Maintenance	2	4	0	4
HRT 151	Plant Identification I	3	4	0	5
HRT 180	Bedding Plant Production	2	2	0	3
HRT 201	Agriculture Chemicals	3	0	0	3
		13	10	0	18

FOURTH QUARTER

HRT 145	Entomology and Pathology	4	2	0	5
HRT 152	Plant Identification II	3	4	0	5
HRT 240	Landscape Construction I	4	2	0	5
HRT 256	Nursery Management I	2	4	0	4
		13	12	0	19

FIFTH QUARTER

ENG 103	Technical Report Writing	3	0	0	3
HRT 241	Landscape Construction II	4	2	0	5
HRT 251	Landscape Design I	3	4	0	5
HRT 258	Turf Practices	3	2	0	4
		13	8	0	17

SIXTH QUARTER

HRT 252	Landscape Design II	3	4	0	5
HRT 257	Nursery Management II	2	4	0	4
MAT 119	Principles of Mathematics	5	0	0	5
SOC 103	Sociology	3	0	0	3
		13	8	0	17

SEVENTH QUARTER

HRT 200	Practicum	0	0	30	3
HRT 210	Field Analysis	5	0	0	5
HRT 220	Vegetable and Flower Gardening	4	0	0	4
		9	0	30	12

In addition to the required curriculum courses, each student will be required to complete an additional two (2) courses for a minimum of three (3) credit hours in order to receive the A.A.S. degree. These courses will be designated as unrestricted electives and must be chosen from disciplines outside the student's areas of specialization.

LAW ENFORCEMENT TECHNOLOGY T-064

CURRICULUM DESCRIPTION:

The Law Enforcement Technology curriculum prepares individuals for a career in the law enforcement services occupations field and other allied occupations. Law enforcement occupations require a thorough understanding of criminal behavior, criminal investigation, interpersonal communications, law, patrol operations, psychology, sociology, traffic management and other aspects of law enforcement administration and operations.

Job opportunities are available with federal, state, county, and municipal governments. In addition, knowledge, skills, and abilities acquired in this course of study qualify one for job opportunities with private enterprise in such areas as industrial, retail, and private security.

JOB OPPORTUNITIES:

Alcohol Enforcement Officer	Investigator
College or University Officer	Highway Patrolman
Correctional Officer	Police Officer
Correctional Programs Assistant	Park Security Officer
Deputy Sheriff	Private Security Officer
Industrial Security Officer	Retail Security Officer
	Wildlife Enforcement Officer

TOTAL CREDIT HOURS: 121

CURRICULUM BY QUARTERS:

Course Title	Hours Per Week			
	C	L	P	QH
FIRST QUARTER				
CJC 101 Introduction to Criminal Justice	5	0	0	5
CJC 102 Criminology	5	0	0	5
ENG 100 Oral Communication	3	0	0	3
SOC 102 General Sociology	5	0	0	5
	18	0	0	18
SECOND QUARTER				
CJC 103 Government--National	5	0	0	5
CJC 220 Criminal Justice Organization and Administration	5	0	0	5
ENG 101 Introduction to Written Communication	3	0	0	3
SOC 209 Social Problems	3	0	0	3
	16	0	0	16

THIRD QUARTER

BIO 101	General Biology I	3	2	0	4
CJC 104	Government--State and Local	5	0	0	5
CJC 120	Administration of Justice	4	0	0	4
CJC 213	Criminal Evidence	3	0	0	3
ENG 102	Composition	3	0	0	3
		18	2	0	19

FOURTH QUARTER

BIO 102	General Biology II	3	2	0	4
CJC 110	Crime and Delinquency	5	0	0	5
CJC 121	Criminal Justice--Seminar and Practicum	5	0	10	6
		13	2	10	15

FIFTH QUARTER

CJC 115	Criminal Law I	5	0	0	5
CJC 117	Constitutional Law	3	0	0	3
ENG 103	Technical Report Writing	3	0	0	3
MAT 115	Fundamental Concepts of Algebra	3	0	0	3
PSY 102	General Psychology	5	0	0	5
		19	0	0	19

SIXTH QUARTER

CJC 116	Criminal Law II	5	0	0	5
CJC 210	Criminalistics I	3	2	0	4
CJC 260	Ethics in Criminal Justice	3	0	0	3
SOC 211	Victimology	3	0	0	3
		14	2	0	15

SEVENTH QUARTER

CJC 211	Criminalistics II	3	2	0	4
ENG 115	Appreciation of Literature	3	0	0	3
MAT 116	Fundamental Concepts of Statistics	5	0	0	5
PSY 108	Abnormal Psychology	5	0	0	5
		16	2	0	17

In addition to the required curriculum courses, each student will be required to complete an additional two (2) courses for a minimum of two (2) credit hours in order to receive the A.A.S. degree. These courses will be designated as unrestricted electives and must be chosen from disciplines outside the student's areas of specialization.

MANUFACTURING ENGINEERING TECHNOLOGY T-050

CURRICULUM DESCRIPTION:

The primary objective of the Manufacturing Engineering Technology curriculum is the training of personnel to assist the engineer or small industry in planning, tooling, operating, servicing, and supervising manufacturing operations. This curriculum provides a basic background of mechanical and related theory, with specific skills in the use of manufacturing and testing equipment. Students are given experiences in operating and servicing machines, accompanied by general education and management courses.

A graduate of this program may qualify for an entry position in one of several manufacturing functions: methods, analysis, production scheduling, quality control, materials testing, plant layout, time study, machine tooling, maintenance, and equipment and instrument work.

JOB OPPORTUNITIES:

Mechanical Engineering Technician
Mechanical Technician
Tool Planner
Industrial Engineering Technician
Quality Control Technician
Material Scheduler
Tool Designer Apprentice
Automated Equipment Engineering Technician
Numerical Control Tool Programmer

TOTAL CREDIT HOURS: 118

CURRICULUM BY QUARTERS:

Course Title

Hours Per Week

C L P QH

FIRST QUARTER

CAD 151	Computer Graphics	2	2	0	3
CET 105	Computer Tools for Engineering Technology I	0	0	3	1
DFT 101	Technical Drafting I	1	0	3	2
ENG 101	Introduction to Written Communication	3	0	0	3
MAT 101	Technical Mathematics I	5	0	0	5
MEC 101	Machine Processes I	1	0	6	3
		12	2	12	17

SECOND QUARTER

DFT 102	Technical Drafting II	1	0	3	2
ENG 102	Composition	3	0	0	3
MAT 102	Technical Mathematics II	5	0	0	5
MEC 102	Machine Processes II	1	0	6	3
PHY 111	Physics - Mechanics	3	2	0	4
		13	2	9	17

THIRD QUARTER

CET 106	Computer Tools for Engineering Technology II	0	0	3	1
ENG 103	Technical Report Writing	3	0	0	3
MAT 103	Technical Mathematics III	5	0	0	5
MEC 201	Manufacturing Processes I	1	0	6	3
PHY 112	Physics - Materials and Heat	3	2	0	4
		12	2	9	16

FOURTH QUARTER

MEC 104	Applied Mechanics	5	0	0	5
MEC 180	Programming for Manufacturing	3	0	3	4
MEC 210	Ferrous Metallurgy	3	0	3	4
MEC 235	Fluid Power	3	0	3	4
		14	2	9	17

FIFTH QUARTER

CHM 101	Chemistry	4	2	0	5
MEC 202	Manufacturing Processes II	2	0	6	4
MEC 205	Strength of Materials	3	2	0	4
PHY 113	Physics - Electricity	3	2	0	4
		12	6	6	17

SIXTH QUARTER

ENG 100	Oral Communication	3	0	0	3
ISC 202	Quality Control	3	2	0	4
ISC 203	Motion and Time Study	3	2	0	4
MEC 237	Control Systems	3	2	0	4
		12	6	0	15

SEVENTH QUARTER

ECO 102	Economics I	3	0	0	3
ISC 209	Plant Layout	3	2	0	4
MEC 203	Welding Processes	2	0	3	3
MEC 240	Introduction to Robotics	3	2	0	4
PSY 206	Applied Psychology	3	0	0	3
		14	4	3	17

In addition to the required curriculum courses, each student will be required to complete an additional two (2) courses for a minimum of two (2) credit hours in order to receive the A.A.S. degree. These courses will be designated as unrestricted electives and must be chosen from disciplines outside the student's areas of specialization.

MARKETING AND RETAILING T-020

CURRICULUM DESCRIPTION:

The Marketing and Retailing curriculum is designed to prepare the individual for positions in various marketing and retailing businesses and industries. This purpose will be fulfilled through study and application in areas such as marketing and merchandising techniques, management, selling, advertising, retailing and credit and collection procedures.

Through knowledge and skills, the individual will be able to perform marketing and distribution activities and, through the development of personal competencies and qualities, will be provided the opportunity to enter an array of marketing and distribution jobs.

JOB OPPORTUNITES:

Entry Level

Display Person
General Salesperson
Assistant Buyer
Trainee Manager

Advanced Level

Display Manager
Store Manager
Buyer
Department Manager

TOTAL CREDIT HOURS: 112 or 113

CURRICULUM BY QUARTERS:

Course Title

Hours Per Week

C L P QH

FIRST QUARTER

BUS 100	Basic Keyboarding	3	0	0	3
BUS 115	Business Law I	3	0	0	3
ENG 100	Oral Communication	3	0	0	3
MAT 119	Principles of Mathematics	5	0	0	5
		14	0	0	14

SECOND QUARTER

BUS 109	Business Mathematics	5	0	0	5
BUS 116	Business Law II	3	0	0	3
BUS 232	Sales Development	3	0	0	3
BUS 263	Retailing I	3	0	0	3
ENG 101	Introduction to Written Communication	3	0	0	3
		17	0	0	17

THIRD QUARTER

BUS 264	Retailing II	3	0	0	3
BUS 272	Principles of Supervision	3	0	0	3
EDP 101	Principles of Business Data Processing	3	2	0	4
ENG 102	Composition	3	0	0	3
PSY 206	Applied Psychology	3	0	0	3
		15	2	0	16

FOURTH QUARTER

BUS 120	Accounting I	4	0	3	5
EDP 103	Introduction to Microcomputing DOS	3	0	0	3
ENG 206	Communications	3	0	0	3
PSY 112	Personality Development	3	0	0	3
		13	0	3	14

FIFTH QUARTER

BUS 234	Sales Management	3	0	0	3
BUS 239	Marketing	5	0	0	5
BUS 245	Advertising Using Desktop Graphics	3	2	0	4
ECO 102	Economics I	3	0	0	3
ENG 205	Report Writing	3	0	0	3
		17	2	0	18

SIXTH QUARTER

AIB 209	Installment Credit	4	0	0	4
BUS 128	Personal Financial Management	5	0	0	5
ECO 104	Economics II	3	0	0	3
EDP 156	Microcomputer Graphics	3	0	0	3
		15	0	0	15

SEVENTH QUARTER

BUS 131	Human Relations Skills in Organizations	3	0	0	3
BUS 242	Visual Merchandising	3	2	0	4
BUS 249	Marketing - Retailing Seminar	3	0	20	5
OR		OR			
BUS	Electives	6	0	0	6
BUS 262	Fashion Merchandising	3	2	0	4
		12	4	20	16
OR		OR			
		15	4	0	17

In addition to the required curriculum courses, each student will be required to complete an additional two (2) courses for a minimum of two (2) credit hours in order to receive the A.A.S. degree. These courses will be designated as unrestricted electives and must be chosen from disciplines outside the student's areas of specialization.

MECHANICAL DRAFTING AND DESIGN TECHNOLOGY T-043

CURRICULUM DESCRIPTION:

The Mechanical Drafting and Design Technology curriculum prepares technicians for drafting and/or designing mechanical parts, mechanisms and mechanical systems.

Emphasis is placed on developing the student's ability to think and plan as well as on the development of drafting and design skills. Computer Aided Drafting (CAD) and conventional equipment will be used to produce drawings such as sectional views, subassemblies and major components of machinery and mechanical systems.

Coursework includes the study of technical drafting and design, materials, applied mechanics, mechanical systems, manufacturing methods, manufacturing processes, applied physics, technical mathematics, descriptive geometry, computer applications, and written and oral communications.

Mechanical drafting and design technicians are employed in many types of manufacturing, fabrication, research and development, and service industries.

JOB OPPORTUNITIES:

Mechanical Design Technician
Mechanical Drafter
Tool Design Drafter
CAD Drafter/Designer
Detail Drafter

TOTAL CREDIT HOURS: 120

CURRICULUM BY QUARTERS:

Course Title

Hours Per Week

C L P QH

FIRST QUARTER

CAD 151	Computer Graphics	2	2	0	3
CET 105	Computer Tools for Engineering Technology I	0	0	3	1
DFT 101	Technical Drafting I	1	0	3	2
ENG 101	Introduction to Written Communication	3	0	0	3
MAT 101	Technical Mathematics I	5	0	0	5
MEC 101	Machine Processes I	1	0	6	3
		12	2	12	17

SECOND QUARTER

CAD 152	Computer Aided Drafting I	1	0	3	2
DFT 102	Technical Drafting II	1	0	3	2
ENG 102	Composition	3	0	0	3
MAT 102	Technical Mathematics II	5	0	0	5
MEC 102	Machine Processes II	1	0	6	3
PHY 111	Physics - Mechanics	3	2	0	4
		14	2	12	19

THIRD QUARTER

CET 106	Computer Tools for Engineering Technology II	0	0	3	1
DFT 103	Technical Drafting III	1	0	3	2
ENG 103	Technical Report Writing	3	0	0	3
MAT 103	Technical Mathematics III	5	0	0	5
MEC 201	Manufacturing Processes I	1	0	6	3
PHY 112	Physics - Materials and Heat	3	2	0	4
		13	2	12	18

FOURTH QUARTER

CAD 153	Computer Aided Drafting II	2	2	0	3
DFT 205	Design Drafting I	1	0	3	2
DFT 260	Geometric Dimensioning and Tolerancing	1	0	3	2
MEC 104	Applied Mechanics	5	0	0	5
MEC 210	Ferrous Metallurgy	3	0	3	4
MEC 235	Fluid Power	3	0	3	4
		15	2	12	20

FIFTH QUARTER

CAD 154	Computer Aided Drafting III	1	2	0	2
DFT 204	Descriptive Geometry	2	0	3	3
DFT 206	Design Drafting II	1	0	3	2
MEC 205	Strength of Materials	3	2	0	4
PHY 113	Physics - Electricity	3	2	0	4
		10	6	6	15

SIXTH QUARTER

DFT 211	Mechanisms	3	0	3	4
DFT 223	Design Drafting III	2	0	6	4
ENG 100	Oral Communication	3	0	0	3
MEC 237	Control Systems	3	2	0	4
		11	2	9	15

SEVENTH QUARTER

DFT 212	Jig and Fixture Design	2	0	6	4
DFT 224	Product Design	1	0	3	2
DFT 225	Computer Graphics Design	1	0	3	2
ECO 102	Economics I	3	0	0	3
PSY 206	Applied Psychology	3	0	0	3
		10	0	12	14

In addition to the required curriculum courses, each student will be required to complete an additional two (2) courses for a minimum of two (2) credit hours in order to receive the A.A.S. degree. These courses will be designated as unrestricted electives and must be chosen from disciplines outside the student's areas of specialization.

MEDICAL SONOGRAPHY T-180

CURRICULUM DESCRIPTION:

The Medical Sonography curriculum offers education options of a one-year diploma program for two-year allied health occupations as recognized by the American Medical Association (AMA) or a two-year associate in applied science degree (AAS) program for high school graduates. The curriculum provides for knowledge and clinical skills in the application of high frequency sound waves to image internal body structures. Physics, cross-sectional anatomy, abdominal, gynecological, obstetrical, breast, and thyroid sonography are emphasized. Competency in the identification of normal anatomy, sonic physics, stages of fetal development, and use of equipment in each procedure as well as effective communication skills are necessary to obtain high quality sonograms to assist in recognizing abnormalities and in making diagnoses.

Graduates of the diploma program option are eligible to apply to the American Registry of Diagnostic Medical Sonographers for examinations in physics, abdomen, obstetrics, and gynecology. Graduates from an AMA approved associate degree program are eligible to apply for these examinations upon graduation.

Graduates may be employed as staff and department heads in clinics, private doctors' offices, hospitals, and as instructors in colleges and universities.

JOB OPPORTUNITIES:

Instructors

Staff Medical Sonographer

Staff Ultrasound Sonographer

TOTAL CREDIT HOURS: 139

CURRICULUM BY QUARTER:

Course Title

Hours Per Week

C L P QH

FIRST QUARTER

BIO 107	Anatomy and Physiology I
BIO 115	Medical Terminology I
BIO 116	Medical Terminology II
MAT 101	Technical Mathematics I
RDT 113	Departmental Orientation and Medical Ethics and Law
SON 100	Orientation to Sonography

3	2	0	4
1	0	0	1
1	0	0	1
5	0	0	5
2	2	0	3
2	0	0	2
14	4	0	16

SECOND QUARTER

BIO 108	Anatomy and Physiology II
ENG 100	Oral Communication
PSY 101	Psychology
RDT 112	Introduction to Patient Care Techniques
SON 111	Medical Sonography Physics I

3	2	0	4
3	0	0	3
3	0	0	3
2	0	0	2
3	0	0	3
14	2	0	15

THIRD QUARTER

BIO 169	Fundamentals of Disease Processes	4	0	0	4
ENG 101	Introduction to Written Communication	3	0	0	3
PSY 115	Psychology of Helping Relationships	3	0	0	3
SOC 103	Sociology	3	0	0	3
SON 121	Medical Sonography Physics II	3	0	0	3
		16	0	0	16

FOURTH QUARTER

EDP 102	Microcomputer Concepts	3	0	0	3
ENG 102	Composition	3	0	0	3
SON 132	Sectional Anatomy	3	0	0	3
SON 256	Practicum I	2	2	15	8
		11	2	15	17

FIFTH QUARTER

SON 133	Sonographic Anatomy I	4	0	0	4
SON 153	Scanning Techniques I	2	4	0	4
SON 266	Practicum II	1	2	24	10
		7	6	24	18

SIXTH QUARTER

SON 134	Sonographic Anatomy II	4	0	0	4
SON 154	Scanning Techniques II	1	4	0	3
SON 250	Sonographic Pathology I	4	0	0	4
SON 276	Practicum III	0	0	24	8
		9	4	24	19

SEVENTH QUARTER

SON 240	Embryology and Fetal Development	4	0	0	4
SON 251	Sonographic Pathology II	4	0	0	4
SON 260	Case Studies I	2	0	0	2
SON 286	Practicum IV	0	0	24	8
		10	0	24	18

EIGHTH QUARTER

SON 261	Case Studies II	2	0	0	2
SON 270	Sonographic Seminars	5	0	0	5
SON 271	Introduction to Vascular and Cardiac Sonography	3	0	0	3
SON 296	Practicum V	0	0	24	8
		10	0	24	18

In addition to the required curriculum courses, each student will be required to complete an additional two (2) courses for a minimum of two (2) credit hours in order to receive the A.A.S. degree. These courses will be designated as unrestricted electives and must be chosen from disciplines outside the student's areas of specialization.

NUCLEAR MEDICINE TECHNOLOGY T-104

CURRICULUM DESCRIPTION:

Nuclear medicine is a health technology which utilizes the internal administration of radioactive materials. The field is primarily diagnostic, although some therapeutic procedures are performed. The nuclear medicine technologist works under the direction of a physician who is licensed for the use of radioactive materials.

The Nuclear Medicine Technology curriculum prepares students to perform as clinical nuclear medicine technologists. The emphasis of the program is on the development of the skills needed by the clinical technologist. These skills include patient care, utilization of radioactive materials, operation of specialized imaging and counting instrumentation, and performance of laboratory procedures. In addition to the development of these skills, the students receive instruction relating to the theories and principles from which the clinical procedures are developed.

Graduates of the program are eligible to take either of the two national certification/registration examinations currently offered. These examinations are given by the Nuclear Medicine Technology Certification Board (NMTCB) and the American Registry of Radiologic Technologists (ARRT).

Individuals who wish to enter a program of Nuclear Medicine Technology should, if possible, complete high school courses in algebra, biology, chemistry, and physics prior to entry.

JOB OPPORTUNITIES:

Nuclear Medicine Technologist

TOTAL CREDIT HOURS: 138

CURRICULUM BY QUARTERS:

Course Title

Hours Per Week C L P QH

FIRST QUARTER

BIO 107	Anatomy and Physiology I	3	2	0	4
BIO 115	Medical Terminology I	1	0	0	1
CHM 103	Chemistry - General and Inorganic	3	2	0	4
MAT 113	Allied Health Mathematics I	3	0	0	3
NMT 100	Introduction to Nuclear Medicine Technology	1	2	3	3
PSY 101	Psychology	3	0	0	3
		14	6	3	18

SECOND QUARTER

BIO 108	Anatomy and Physiology II	3	2	0	4
BIO 116	Medical Terminology II	1	0	0	1
ENG 100	Oral Communication	3	0	0	3
MAT 114	Allied Health Mathematics II	3	0	0	3
NMT 106	Nuclear Medicine Technology II	2	0	0	2
NMT 119	Introduction to Clinical Practice I	0	2	6	3
PHY 100	Introduction to Physics	3	0	0	3
		15	4	6	19

THIRD QUARTER

ENG 101	Introduction to Written Communication	3	0	0	3
MAT 116	Statistics	5	0	0	5
NMT 107	Nuclear Medicine Technology III	2	2	0	3
NMT 116	Nuclear Physics	2	0	0	2
NMT 124	Introduction to Clinical Practice II	0	0	12	4
PHY 102	Electricity and Electronics	3	0	0	3
PSY 111	Abnormal Behavior	3	0	0	3
		18	2	12	23

FOURTH QUARTER

ENG 102	Composition	3	0	0	3
NMT 108	Nuclear Medicine Technology IV	3	0	0	3
NMT 117	Health Physics	2	0	0	2
NMT 201	(202, 203, or 204) Clinical Practice	0	0	21	7
NMT 213	Principles of Nuclear Pharmacy	3	0	0	3
		11	0	21	18

FIFTH QUARTER

NMT 111	Principles of Nuclear Medicine I	2	0	0	2
NMT 202	(201, 203, or 204) Clinical Practice	0	0	21	7
NMT 220	Instrumentation I	2	0	0	2
NMT 225	Computers in Nuclear Medicine	3	0	0	3
		7	0	21	14

SIXTH QUARTER

NMT 203	(201, 202, or 204) Clinical Practice	0	0	21	7
NMT 221	Principles of Nuclear Medicine II	2	0	0	2
NMT 235	Instrumentation II	2	2	0	3
NMT 251	Principles of In Vitro Nuclear Medicine I	2	2	0	3
		6	4	21	15

SEVENTH QUARTER

NMT 204	(201, 202, or 203) Clinical Practice	0	0	21	7
NMT 231	Principles of Nuclear Medicine III	2	0	0	2
NMT 245	Instrumentation III	2	2	0	3
NMT 289	Radiobiology	2	0	0	2
		6	2	21	14

EIGHTH QUARTER

NMT 258	Principles of In Vitro Nuclear Medicine II	2	2	0	3
NMT 290	Nuclear Medicine Technology Seminar	2	0	0	2
NMT 292	Nuclear Medicine Technology Review	2	0	0	2
NMT 300	Clinical Practice Review	0	0	15	5
SOC 103	Sociology	3	0	0	3
		9	2	15	15

In addition to the required curriculum courses, each student will be required to complete an additional two (2) courses for a minimum of two (2) credit hours in order to receive the A.A.S. degree. These courses will be designated as unrestricted electives and must be chosen from disciplines outside the student's areas of specialization.

PARALEGAL TECHNOLOGY T-120

The Triad Regional Paralegal Technology Program is a cooperative educational program offered by Davidson County Community College at its own campus, Forsyth Technical Community College, Guilford Technical Community College, and Rockingham Community College. All courses required in the program are available on each local campus.

CURRICULUM DESCRIPTION:

The Paralegal Technology curriculum trains individuals to work under the general direction of lawyers, to relieve lawyers of routine matters, and to assist them in the conduct of more complicated and difficult tasks. The legal technician should be capable of doing independent legal work under the supervision of a lawyer, supervise secretaries in their work for the lawyer, and search out information and court facts for the lawyer. Training will include general subjects such as English, accounting, and psychology, as well as specialized legal courses such as legal definitions, court systems, laws, and techniques of investigation.

Graduates of the Paralegal Technology curriculum should be able to directly assist a lawyer or group of lawyers in most facets of law, but they must always work under the supervision of a lawyer. The legal technician will not be qualified to give legal advice, enter into courtroom procedure, or be involved in litigation except as an assistant to the lawyer. Paralegal graduates will be able to assist in work on probate matters, conducting investigations, searching public records, preparation of tax forms, serving and filing legal documents, bookkeeping, library research, and providing office management assistance. Employment opportunities are available in public and private law firms and with individual lawyers.

JOB OPPORTUNITITES:

Paralegal Technician

Examples of employment opportunities for Paralegal Technician:

- Public and private law firms
- Legal department of government
- Business and industry
- Law-related jobs in insurance
- Financial institutions
- Corporations
- Free Lance Opportunities

TOTAL CREDIT HOURS: 119

CURRICULUM BY QUARTERS:

Course Title

Hours Per Week

C L P QH

FIRST QUARTER

* BUS 100	Basic Keyboarding	3	0	0	3
* BUS 115	Business Law I	3	0	0	3
* ENG 150	Freshman Composition I	5	0	0	5
LEG 115	Paralegal in the Legal System	3	0	0	3
* MAT 115	Fundamental Concepts of Algebra	3	0	0	3
		17	0	0	17

SECOND QUARTER

* BUS	116	Business Law II	3	0	0	3
* BUS	229	Taxes	2	0	3	3
* ENG	151	Freshman Composition II	5	0	0	5
LEG	132	Law Library Research and Management	3	2	0	4
			13	2	3	15

THIRD QUARTER

* EDP	103	Introduction to Microcomputing DOS	3	0	0	3
* ENG	206	Communications	3	0	0	3
LEG	133	Law Library Research and Management	2	0	0	2
LEG	135	Legal Systems	4	0	0	4
		Social Science Elective	5	0	0	5
			17	0	0	17

FOURTH QUARTER

BUS	230D	Taxes for Paralegals	4	0	0	4
LEG	103	Evidence for Paralegals	4	0	0	4
LEG	136	Legal Systems	4	0	0	4
LEG	225	Law Office Management	4	0	0	4
		* Elective (Any three-hour technical or general education course)	3	0	0	3
			19	0	0	19

FIFTH QUARTER

CJC	210D	Investigative Procedures	5	0	0	5
LEG	223	Investigation of Civil Claims	3	0	0	3
LEG	227	Estate Management	4	0	0	4
LEG	282	Property Transactions	4	0	0	4
MED	110	Medical Terminology and Records	2	0	0	2
			19	0	0	19

SIXTH QUARTER

LEG	207	Legal Software	1	4	0	3
LEG	213	Law and The Family	3	0	0	3
LEG	228	Estate Management	3	2	0	4
LEG	235	Litigation Preparation	4	0	0	4
LEG	283	Property Transactions	3	2	0	4
			14	8	0	18

SEVENTH QUARTER

* ENG	100	Oral Communication	3	0	0	3
LEG	214	Domestic Law Documents	2	0	0	2
LEG	230	Bankruptcy and Collection Process	4	0	0	4
LEG	261	Clinical Practice	1	0	10	2
		OR				
		Elective	1	0	10	2
LEG	280	Business Organizations Law	3	0	0	3
			13	0	10	14

*These are courses offered by Forsyth Technical Community College that will be accepted as substitute courses for the courses required by Davidson County Community College for graduation from the Paralegal Technology Program.

RADIATION THERAPY TECHNOLOGY T-221

CURRICULUM DESCRIPTION:

Radiation Therapy Technology is a health technology which applies prescribed doses of ionizing radiation to specific areas of the patient's body for treatment of disease, primarily cancer. The technologist works in conjunction with the radiation therapy staff nurses, physicists and physicians. The graduate technologist, through academic and clinical studies, is skilled in treatment management, administration of prescribed radiation therapy treatment, and provision of patient support.

Radiation therapy technologists find employment in radiation therapy facilities in hospitals and free-standing cancer treatment centers. Major responsibilities fall into the specialties of patient care, education, research, treatment planning (dosimetry), and departmental management.

Graduates are eligible to take the national examination given by the American Registry of Radiologic Technologists for certification and registration in radiation therapy technology.

Individuals preparing for enrollment in the curriculum should consider completion of courses in biology, geometry, and algebra prior to entrance. Courses in chemistry and physics have also proven to be helpful.

JOB OPPORTUNITIES:

Radiation Therapy Technologist

TOTAL CREDIT HOURS: 142

CURRICULUM BY QUARTERS:

Course Title		Hours Per Week			
		C	L	P	QH
FIRST QUARTER					
BIO 107	Anatomy and Physiology I	3	2	0	4
BIO 115	Medical Terminology I	1	0	0	1
BIO 116	Medical Terminology II	1	0	0	1
MAT 101	Technical Mathematics I	5	0	0	5
RDT 112	Introduction to Patient Care Techniques	2	0	0	2
RDT 113	Departmental Orientation and Medical Ethics and Law	2	2	0	3
		14	4	0	16
SECOND QUARTER					
BIO 108	Anatomy and Physiology II	3	2	0	4
ENG 100	Oral Communication	3	0	0	3
PSY 101	Psychology	3	0	0	3
RDT 114	Basic Essentials of Radiologic Technology	3	2	15	9
		12	4	15	19

THIRD QUARTER

BIO 169	Fundamentals of Disease Processes	4	0	0	4
EDP 102	Microcomputer Concepts	3	0	0	3
ENG 101	Introduction to Written Communication	3	0	0	3
RDT 120	Radiation Physics	4	0	0	4
RDT 139	Positioning and Related Anatomy I	3	0	0	3
RTT 130	Radiographic Imaging I	0	2	12	5
		17	2	12	22

FOURTH QUARTER

ENG 102	Composition	3	0	0	3
RDT 130	Radiation Biology and Protection	3	0	0	3
RTT 131	Radiation Therapy Positioning and Anatomy	4	0	0	4
RTT 132	Radiographic Imaging II	0	2	12	5
		10	2	12	15

FIFTH QUARTER

SOC 103	Sociology	3	0	0	3
RTT 205	Radiation Therapy Physics I	3	0	0	3
RTT 214	Orientation to Radiation Therapy	3	2	12	8
RTT 221	Clinical Oncology I	3	0	0	3
		12	2	12	17

SIXTH QUARTER

PSY 115	Psychology of Helping Relationships	3	0	0	3
RTT 206	Radiation Therapy Physics II	3	2	0	4
RTT 215	Radiobiology	3	0	0	3
RTT 222	Clinical Oncology II	3	0	0	3
RTT 227	Radiation Therapy Practicum I	0	0	15	5
		12	2	15	18

SEVENTH QUARTER

RTT 207	Dosimetry I	3	4	0	5
RTT 236	Radiation Therapy Procedures I	3	0	0	3
RTT 237	Radiation Therapy Practicum II	0	0	21	7
		6	4	21	15

EIGHTH QUARTER

RTT 208	Dosimetry II	3	4	0	5
RTT 246	Radiation Therapy Procedures II	3	0	0	3
RTT 247	Radiation Therapy Practicum III	0	0	21	7
RDT 254	Departmental Administration and Quality Assurance	3	0	0	3
		9	4	21	18

In addition to the required curriculum courses, each student will be required to complete an additional two (2) courses for a minimum of two (2) credit hours in order to receive the A.A.S. degree. These courses will be designated as unrestricted electives and must be chosen from disciplines outside the student's areas of specialization.

RADIOLOGIC TECHNOLOGY T-061

CURRICULUM DESCRIPTION:

The Radiologic Technology curriculum prepares graduates to be competent Medical Radiographers. The radiographer is a skilled person qualified by technological education to provide patient services using imaging modalities (as directed by physicians qualified to order and/or perform radiologic procedures) by (1) applying knowledge of the principles of radiation protection for the patient, self, and others; (2) applying knowledge of anatomy, positioning, and radiographic techniques to accurately demonstrate anatomical structures on a radiograph; (3) determining exposure factors to achieve optimum radiographic technique with a minimum of radiation exposure to the patient; (4) examining radiographs for the purpose of evaluating technique, positioning, and other pertinent technical qualities; (5) exercising discretion and judgment in the performance of medical imaging procedures; (6) providing patient care essential to radiologic procedures; and (7) recognizing emergency patient conditions and initiating life saving first aid.

Graduates may be employed in radiology departments in hospitals, clinics, physicians' offices, research and medical laboratories, federal and state agencies, and industry.

Graduates are eligible to take the national examination given by the American Registry of Radiologic Technologists for certification and registration as medical radiographers.

Individuals desiring a career in radiologic technology should take courses in biology, algebra, and chemistry, and/or physics prior to entering the program.

JOB OPPORTUNITIES:

Radiologic Technologist
Radiographer

TOTAL CREDIT HOURS: 146

CURRICULUM BY QUARTERS:

Course Title	Hours Per Week			
	C	L	P	QH
FIRST QUARTER				
BIO 107 Anatomy and Physiology I	3	2	0	4
BIO 115 Medical Terminology I	1	0	0	1
BIO 116 Medical Terminology II	1	0	0	1
MAT 113 Allied Health Mathematics I	3	0	0	3
PSY 101 Psychology	3	0	0	3
RDT 112 Introduction to Patient Care Techniques	2	0	0	2
RDT 113 Department Orientation and Medical Ethics and Law	2	2	0	3
	15	4	0	17
SECOND QUARTER				
BIO 108 Anatomy and Physiology II	3	2	0	4
ENG 100 Oral Communication	3	0	0	3
MAT 114 Allied Health Mathematics II	3	0	0	3
RDT 114 Basic Essentials of Radiologic Technology	3	2	15	9
	12	4	15	19

THIRD QUARTER

ENG 101	Introduction to Written Communication	3	0	0	3
RDT 120	Radiation Physics	4	0	0	4
RDT 137	Radiographic Technique I	3	2	0	4
RDT 138	Practicum I	0	2	15	6
RDT 139	Positioning and Related Anatomy I	3	0	0	3
		13	4	15	20

FOURTH QUARTER

EDP 103	Introduction to Microcomputing DOS	3	0	0	3
ENG 102	Composition	3	0	0	3
RDT 130	Radiation Biology and Protection	3	0	0	3
RDT 148	Practicum II	0	2	15	6
RDT 149	Positioning and Related Anatomy II	3	0	0	3
		12	2	15	18

FIFTH QUARTER

RDT 237	Radiographic Technique II	3	0	0	3
RDT 248	Practicum III	0	2	21	8
RDT 261	Pediatric, Emergency, and Operative Radiography	2	0	0	2
RDT 269	Positioning and Related Anatomy III	3	0	0	3
RDT 289	Film Critique I	2	0	0	2
		10	2	21	18

SIXTH QUARTER

PSY 115	Psychology of Helping Relationships	3	0	0	3
RDT 258	Practicum IV	0	2	21	8
RDT 279	Positioning and Related Anatomy IV	3	0	0	3
RDT 283	Radiographic Pathology	2	0	0	2
RDT 290	Film Critique II	2	0	0	2
		10	2	21	18

SEVENTH QUARTER

RDT 233	Seminar	2	0	0	2
RDT 250	Special Procedures I	3	0	0	3
RDT 268	Practicum V	0	2	21	8
RDT 291	Film Critique III	2	0	0	2
SOC 103	Sociology	3	0	0	3
		10	2	21	18

EIGHTH QUARTER

RDT 252	Special Procedures II	3	0	0	3
RDT 254	Departmental Administration and Quality Assurance	3	0	0	3
RDT 278	Practicum VI	0	2	21	8
RDT 292	Film Critique IV	2	0	0	2
		8	2	21	16

In addition to the required curriculum courses, each student will be required to complete an additional two (2) courses for a minimum of two (2) credit hours in order to receive the A.A.S. degree. These courses will be designated as unrestricted electives and must be chosen from disciplines outside the student's areas of specialization.

REAL ESTATE T-127

CURRICULUM DESCRIPTION:

The purposes of the Real Estate curriculum are to (1) prepare the individual to enter the real estate industry, (2) provide an educational program for persons directly involved in various phases of the real estate industry, and (3) provide an opportunity for individuals wanting to fulfill professional or general interest needs.

These purposes will be fulfilled through a thorough introduction to real estate principles, practices, industry ethics, finance, law, appraisal techniques and trends.

The curriculum will provide the opportunity for an individual to enter public or private employment in real estate areas such as sales, finance, development, market analysis, valuation and property management. Advanced real estate job opportunities are available in areas such as brokerage, management, appraising or consulting.

JOB OPPORTUNITIES:

Entry Level

Real Estate Salesperson
Real Estate Broker
Sales Representative Trainee
Credit Investigator Trainee
Assistant Office Manager Trainee
Office Manager
Mortgage (lender) Loan Officer
Credit and Collection Manager

Advanced Level

Credit Analyst
Land Developer
Property Manager
Real Estate Appraiser
Real Estate Counselor

TOTAL CREDIT HOURS: 115

CURRICULUM BY QUARTERS:

Course Title

Hours Per Week
C L P QH

FIRST QUARTER

BUS 162	Fundamentals of Real Estate	5	0	0	5
BUS 164	Real Estate Law	5	0	0	5
ENG 101	Introduction to Written Communication	3	0	0	3
MAT 119	Principles of Mathematics	5	0	0	5
		18	0	0	18

SECOND QUARTER

BUS 109	Business Mathematics	5	0	0	5
BUS 165	Real Estate Brokerage Operations	3	0	0	3
BUS 209	Real Estate Finance	5	0	0	5
ENG 102	Composition	3	0	0	3
		16	0	0	16

THIRD QUARTER

ARC 105	Architectural Materials and Methods	3	0	0	3
BUS 120	Accounting I	4	0	3	5
ECO 102	Economics I	3	0	0	3
ENG 100	Oral Communication	3	0	0	3
		13	0	3	14

FOURTH QUARTER

BUS 121	Accounting II	4	0	3	5
BUS 239	Marketing	5	0	0	5
BUS 292	Appraisal I	3	0	0	3
ECO 104	Economics II	3	0	0	3
ENG 205	Report Writing	3	0	0	3
		18	0	3	19

FIFTH QUARTER

BUS 216	Real Estate Sales	3	0	0	3
BUS 245	Advertising Using Desktop Graphics	3	2	0	4
BUS 293	Appraisal II	3	2	0	4
PSY 206	Applied Psychology	3	0	0	3
		12	4	0	14

SIXTH QUARTER

BUS 228	Real Estate Investment and Taxation	3	0	0	3
BUS 247	Business Insurance	3	0	0	3
BUS 294	Appraisal III	3	2	0	4
BUS 296	Property Management	3	0	0	3
ENG 206	Communications	3	0	0	3
		15	2	0	16

SEVENTH QUARTER

BUS 231	Real Estate Merchandising	3	0	0	3
BUS 235	Business Management	5	0	0	5
BUS 236	Land Development	3	2	0	4
BUS 238	Land Use Policy and Governmental Influences on Real Estate	3	2	0	4
		14	4	0	16

In addition to the required curriculum courses, each student will be required to complete an additional two (2) courses for a minimum of two (2) credit hours in order to receive the A.A.S. degree. These courses will be designated as unrestricted electives and must be chosen from disciplines outside the student's areas of specialization.

RESPIRATORY CARE TECHNOLOGY T-091

CURRICULUM DESCRIPTION:

Respiratory Care Technology offers career education for individuals interested in becoming a respiratory therapy technician or respiratory therapist.

The respiratory therapist is qualified to assume primary responsibility for respiratory and cardiac care, including the supervision of technicians. The therapist makes patient care decisions concerning the use of life-support systems, oxygen therapy, and other breathing treatments. They also perform heart and lung studies. Graduates of the therapist program receive an associate degree.

The technician performs tasks which include oxygen therapy, breathing treatments and equipment maintenance. Graduates of the technician program receive a diploma.

Graduates of accredited programs are eligible to apply for admission to the entry-level examination. Graduates of an accredited therapist program are also eligible to take the advanced practitioner examinations. These examinations are given by the National Board for Respiratory Care.

Graduates may be employed in hospitals, clinics, nursing homes, education, industry, and home care.

JOB OPPORTUNITIES:

Respiratory Care Technician

Respiratory Therapist

TOTAL CREDIT HOURS: 128

CURRICULUM BY QUARTERS:

Course Title

Hours Per Week

C L P QH

FIRST QUARTER

BIO 107	Anatomy and Physiology I	3	2	0	4
BUS 141	Medical Vocabulary and Terminology	3	0	0	3
MAT 113	Allied Health Mathematics I	3	0	0	3
PHY 101	Concepts in Physics	3	0	0	3
RTH 109	Respiratory Care I	0	6	0	3
		12	8	0	16

SECOND QUARTER

BIO 108	Anatomy and Physiology II	3	2	0	4
ENG 101	Introduction to Written Communication	3	0	0	3
MAT 114	Allied Health Mathematics II	3	0	0	3
RTH 111	Clinical Experience I	0	2	6	3
RTH 119	Respiratory Care II	1	2	0	2
RTH 140	Chest Physiotherapy	1	0	0	1
		11	6	6	16

THIRD QUARTER

BIO 169	Fundamentals of Disease Processes	4	0	0	4
RTH 112	Clinical Experience II	0	2	12	5
RTH 129	Respiratory Care III	1	2	0	2
RTH 139	Cardiopulmonary Anatomy and Physiology	4	0	0	4
RTH 150	Pharmacology	3	0	0	3
		12	4	12	18

FOURTH QUARTER

EDP 103	Introduction to Microcomputing DOS	3	0	0	3
NUT 101	General Nutrition and Diet Therapy	3	0	0	3
RTH 113	Clinical Experience III	0	2	12	5
RTH 160	Topics in General and Cardiopulmonary Surgery	1	0	0	1
RTH 170	ECG and Hemodynamic Monitoring	1	2	0	2
RTH 180	Cardiopulmonary Diseases	5	0	0	5
		13	4	12	19

FIFTH QUARTER

ENG 102	Composition	3	0	0	3
RTH 215	Ventilators	2	2	0	3
RTH 218	Clinical Experience IV	0	2	12	5
RTH 250	Intensive Respiratory Care	3	0	0	3
RTH 268	Cardiopulmonary Diagnostic Testing	1	2	0	2
		9	6	12	16

SIXTH QUARTER

ENG 103	Technical Report Writing	3	0	0	3
PSY 101	Psychology	3	0	0	3
RTH 211	Neonatal and Pediatric Respiratory Care	3	2	0	4
RTH 228	Clinical Experience V	0	2	12	5
		9	4	12	15

SEVENTH QUARTER

PSY 111	Abnormal Behavior	3	0	0	3
PSY 115	The Psychology of Helping Relationships	3	0	0	3
RTH 238	Clinical Experience VI	0	0	15	5
RTH 255	Seminar	1	0	0	1
RTH 260	Trauma Care	2	0	0	2
		9	0	15	14

EIGHTH QUARTER

RTH 240	Cardiopulmonary Rehabilitation and Home Care	1	0	0	1
RTH 241	Respiratory Care Department Operations	1	0	0	1
RTH 248	Clinical Experience VII	0	0	30	10
		2	0	30	12

In addition to the required curriculum courses, each student will be required to complete an additional two (2) courses for a minimum of two (2) credit hours in order to receive the A.A.S. degree. These courses will be designated as unrestricted electives and must be chosen from disciplines outside the student's areas of specialization.

COLLEGE TRANSFER - ASSOCIATE IN ARTS C-011

CURRICULUM DESCRIPTION:

The College Transfer program is designed to offer students an opportunity to take the first two years of a liberal arts college curriculum. The course work includes literature, humanities, mathematics, physical education and the sciences. Students who maintain a grade average of C or better should be able to transfer these credits to a senior college or university and complete a Bachelor's degree. The Associate in Arts degree program concentrates heavily on the humanities and social sciences and is recommended for those who plan to continue in a Bachelor of Arts degree program at a senior college.

TOTAL CREDIT HOURS: 100

CURRICULUM BY QUARTERS:

Course Title		Hours Per Week			
		C	L	P	QH
FIRST QUARTER					
ENG 150	Freshman Composition I	5	0	0	5
MAT 120	Mathematical Concepts	5	0	0	5
	OR	OR			
MAT 123	College Algebra	5	0	0	5
HIS 101	Western Civilization I	5	0	0	5
PED 101	Fitness for Life	0	0	3	1
		15	0	3	16
SECOND QUARTER					
ENG 151	Freshman Composition II	5	0	0	5
MAT 121	Statistics	5	0	0	5
	OR	OR			
MAT 124	College Trigonometry	5	0	0	5
HIS 102	Western Civilization II	5	0	0	5
PED 102	Fitness and Recreation I	0	0	3	1
		15	0	3	16
THIRD QUARTER					
	Social Science Elective	5	0	0	5
	Humanities Elective	5	0	0	5
	Elective	5	0	0	5
PED 103	Fitness and Recreation II	0	0	3	1
		15	0	3	16

FOURTH QUARTER

BIO 120	Principles of Biology I	3	2	0	4
	OR	OR			
CHM 110	General Inorganic Chemistry I	3	2	0	4
	Elective	5	0	0	5
	Social Science Elective	5	0	0	5
ENG 201	English Literature I	5	0	0	5
	OR	OR			
ENG 210	American Literature I	5	0	0	5
		18	2	0	19

FIFTH QUARTER

BIO 121	Principles of Biology II	3	2	0	4
	OR	OR			
CHM 111	General Inorganic Chemistry II	3	2	0	4
	Elective	5	0	0	5
ENG 202	English Literature II	5	0	0	5
	OR	OR			
ENG 211	American Literature II	5	0	0	5
	Elective	5	0	0	5
		18	2	0	19

SIXTH QUARTER

BIO 122	Principles of Biology III	3	2	0	4
	OR	OR			
CHM 112	Organic Chemistry	3	2	0	4
	Elective	5	0	0	5
	Elective	5	0	0	5
		13	2	0	14

COLLEGE TRANSFER - ASSOCIATE IN SCIENCE C-050

CURRICULUM DESCRIPTION:

The College Transfer program is designed to offer students an opportunity to take the first two years of a liberal arts college curriculum. The course work includes literature, humanities, mathematics, physical education and the sciences. Students who maintain a grade average of C or better should be able to transfer these credits to a senior college or university and complete a Bachelor's degree. The Associate in Science degree program concentrates on mathematics and the physical and life sciences and is intended for those pursuing the Bachelor of Science degree program at a senior college.

TOTAL CREDIT HOURS: 97 or 100

CURRICULUM BY QUARTERS:

Course Title		Hours Per Week			
		C	L	P	QH
FIRST QUARTER					
ENG 150	Freshman Composition I	5	0	0	5
BIO 120	Principles of Biology I	3	2	0	4
	OR	OR			
CHM 110	General Inorganic Chemistry I	3	2	0	4
MAT 123	College Algebra	5	0	0	5
PED 101	Fitness for Life	0	0	3	1
		13	2	3	15
SECOND QUARTER					
ENG 151	Freshman Composition II	5	0	0	5
BIO 121	Principles of Biology II	3	2	0	4
	OR	OR			
CHM 111	General Inorganic Chemistry II	3	2	0	4
MAT 124	College Trigonometry	5	0	0	5
PED 102	Fitness and Recreation I	0	0	3	1
		13	2	3	15
THIRD QUARTER					
BIO 122	Principles of Biology III	3	2	0	4
	OR	OR			
CHM 112	Organic Chemistry	3	2	0	4
MAT 125	Analytic Geometry and Calculus I	5	0	0	5
HIS 101	Western Civilization I	5	0	0	5
PED 103	Fitness and Recreation II	0	0	3	1
		13	2	3	15

FOURTH QUARTER

CHM 110	General Inorganic Chemistry I	3	2	0	4
	OR	OR			
PHY 211	General Physics I with Calculus	4	2	0	5
MAT 126	Analytic Geometry and Calculus II	5	0	0	5
HIS 102	Western Civilization II	5	0	0	5
	Elective	5	0	0	5
		18	2	0	19
	OR	OR			
		19	2	0	20

FIFTH QUARTER

CHM 111	General Inorganic Chemistry II	3	2	0	4
	OR	OR			
PHY 212	General Physics II with Calculus	4	2	0	5
ENG 201	English Literature I	5	0	0	5
	OR	OR			
ENG 210	American Literature I	5	0	0	5
	Elective	5	0	0	5
		13	2	0	14
	OR	OR			
		14	2	0	15

SIXTH QUARTER

CHM 112	Organic Chemistry	3	2	0	4
	OR	OR			
PHY 213	General Physics III with Calculus	4	2	0	5
ENG 202	English Literature II	5	0	0	5
	OR	OR			
ENG 211	American Literature II	5	0	0	5
	Elective	5	0	0	5
	Elective	5	0	0	5
		18	2	0	19
	OR	OR			
		19	2	0	20

PRETECHNICAL PROGRAM T-099

The Pretechnical program provides students with an opportunity to build academic skills and acquire the background which should facilitate success in their desired curriculum program.

For applicants to a degree program who, on the basis of test results and past performance, do not qualify for immediate admission to their chosen program of study, non-credit developmental course work is available and may be required as a prerequisite for registration in specific credit courses. Students taking the required pretechnical work may also take specified courses within their desired curriculum.

Students may then transfer all applicable credit courses into their curriculum program when the criteria have been met and pretechnical and selected curriculum courses have been completed. All credit courses within the student's chosen curriculum will then be applied toward graduation.

Some developmental courses are also open to students who wish to take them for personal benefit.

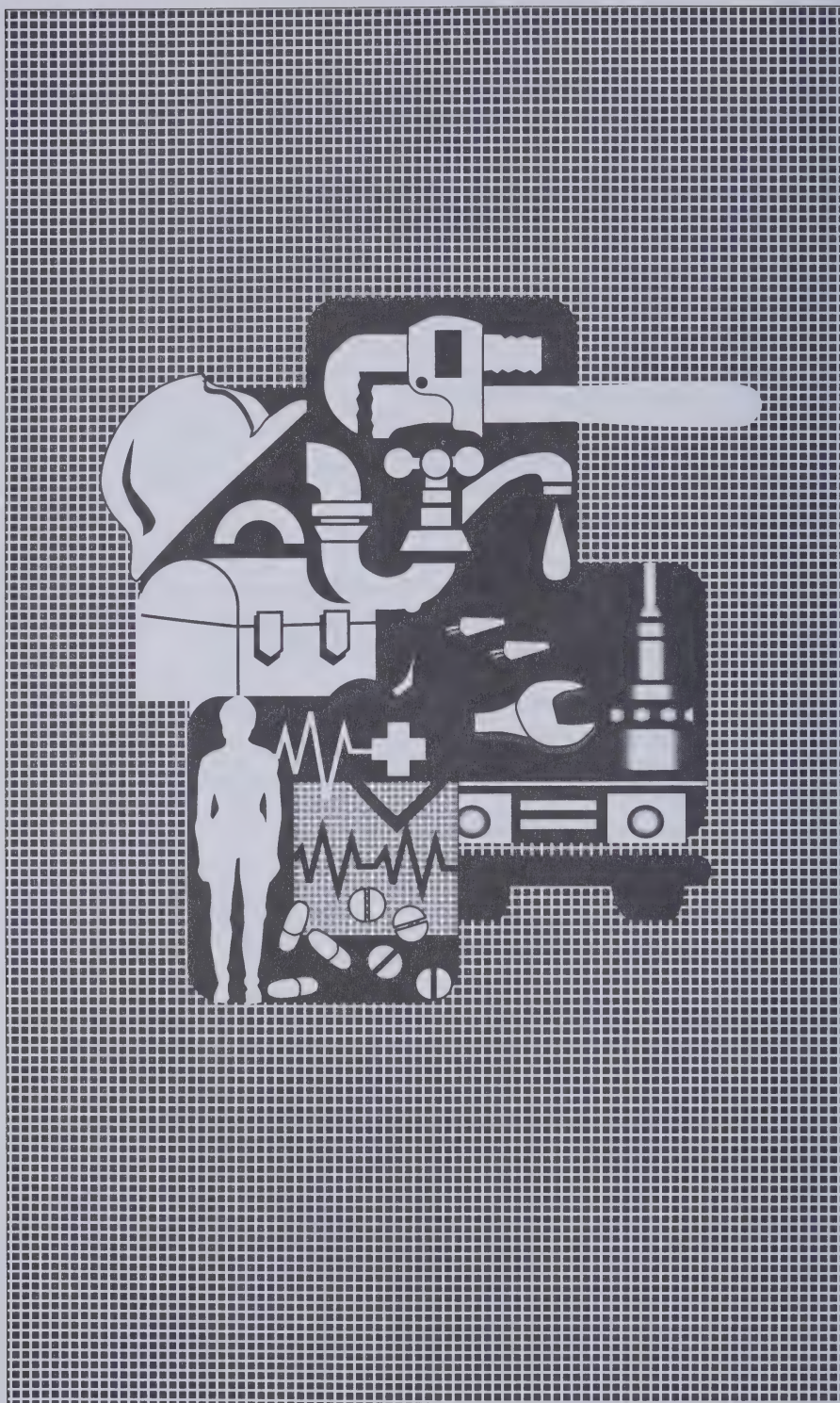
This program offers a series of courses for preparation, remediation, and guidance for students who, for a variety of reasons, do not meet the specific entrance requirements for the regular curriculum programs of their choice. Students who do meet the minimum entrance requirements but whose previous academic records indicate that they may have difficulty in successfully completing their programs are also advised to enter the Pretechnical program.

The students' academic program will be individually designed to meet their specific preparatory and remedial needs. The courses will be selected from the pretechnical offerings and from technical and/or vocational credit courses.

PRETECHNICAL COURSE OFFERINGS:

Course Title			Hours Per Week			
			C	L	P	QH*
ACA 100	Microcomputer as a Study Tool		1	0	0	1
ACA 110	Study Skills		3	0	0	3
BIO 010	Human Anatomy		3	0	0	0(3)
BUS 010	Pretechnical Accounting		5	0	0	0(5)
CHM 010	Pretechnical Chemistry		3	2	0	0(4)
ENG 001	Spelling		3	0	0	0(3)
ENG 005	Language Development I		2	2	0	0(3)
ENG 006	Language Development II		2	2	0	0(3)
ENG 007	Language Development III		2	2	0	0(3)
ENG 008	Language Development IV		2	2	0	0(3)
ENG 010	Basic Writing Skills		5	0	0	0(5)
ENG 017	Principles of Alphabetic System I		5	0	0	0(5)
ENG 018	Principles of Alphabetic System II		5	0	0	0(5)
ENG 019	The Phonetic Approach to Language Structure		5	0	0	0(5)
ENG 021	Basic Reading Skills and Vocabulary I		3	0	0	0(3)
ENG 022	Basic Reading Skills and Vocabulary II		3	0	0	0(3)
ENG 023	Basic Reading Skills and Vocabulary III		3	0	0	0(3)
MAT 001	Structure of Arithmetic		5	0	0	0(5)
MAT 002	Prebusiness Mathematics		5	0	0	0(5)
MAT 003	Introductory Algebra		5	0	0	0(5)
MAT 004	Intermediate Algebra		5	0	0	0(5)
MAT 005	Geometry		5	0		0(5)
MAT 009	Algebra and Trigonometry		5	0	0	0(5)
MAT 020	Mathematics for Health Education		3	0	0	0(3)
NUT 001	Basic Nutrition		3	0	0	0(3)
PHY 001	Pretechnical Physics		3	2	0	0(4)
SOC 020	Academic Survival Skills		2	0	0	0(2)

*Equivalent credit hours shown in parenthesis.



VOCATIONAL DIPLOMA PROGRAM

The diploma curricula are practical in nature and are designed to prepare the student for immediate employment opportunities in a skilled trade. All curricula are designed for one year or four consecutive quarters of intensive study. (Evening curricula require approximately two years.) Upon completion of a curriculum, the graduate will be awarded the State Vocational Diploma. The vocational courses, forming each diploma curriculum, are not designed for transfer to Associate (or higher) degree levels of instruction.

SAMPLE COURSE LISTING

			C	L	P	QH
			(or CE)			
ENG	102	COMPOSITION	3	0	0	3
Course Prefix	Course Number	Course Title	Classroom Hours per week	Laboratory Hours per week	Practicum per week (Practical application or clinical experience per week)	Quarter Hours Credit

Contact Hours per week

AIR CONDITIONING, HEATING, AND REFRIGERATION V-024

CURRICULUM DESCRIPTION:

The Air Conditioning, Heating, and Refrigeration curriculum is designed to teach knowledge and skills necessary for servicing and installing residential and light commercial climate control equipment. Instruction will include heating and cooling theory, applied electricity and electronics, and the operating principles for a wide range of heating and cooling equipment. The diploma program will emphasize start-up and service skills for oil, gas, and electric furnaces, air-cooled air conditioning, and air-to-air heat pumps.

JOB OPPORTUNITITES

Entry Level

Air Conditioning Mechanic
Heating and Air Conditioning Mechanic
Heating Mechanic
HVAC Service Technician

TOTAL CREDIT HOURS: 71

CURRICULUM BY QUARTERS

Course Title

Hours Per Week

C	L	P	QH
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FIRST QUARTER

AHR 1102	Fundamentals of Refrigeration	6	0	9	9
MAT 1102	Algebra	5	0	0	5
PHY 1103	Fundamentals of Electricity	3	2	0	4
WLD 1111	Air Conditioning Welding	0	0	3	1
		14	2	12	19

SECOND QUARTER

AHR 1103	Domestic and Commercial Refrigeration	6	0	12	10
DFT 1107	Blueprint Reading	1	0	3	2
ELC 1111	Applied Electricity	3	0	0	3
ENG 1101	Communications I	3	0	0	3
		13	0	15	18

THIRD QUARTER

AHR 1104 Air Conditioning Controls I	5	0	3	6
AHR 1105 Principles of Air Conditioning	6	0	9	9
ENG 1112 Communications II	3	0	0	3
	14	0	12	18

FOURTH QUARTER

AHR 1106 Air Conditioning Controls II	3	0	0	3
BUS 1103 Small Business Operations	3	0	0	3
HET 1101 Heating Systems	6	0	12	10
	12	0	12	16

AIR CONDITIONING, HEATING, AND REFRIGERATION V-024

Evening Curriculum

CURRICULUM DESCRIPTION:

The Air Conditioning, Heating, and Refrigeration curriculum is designed to teach knowledge and skills necessary for servicing and installing residential and light commercial climate control equipment. Instruction will include heating and cooling theory, applied electricity and electronics, and the operating principles for a wide range of heating and cooling equipment. The diploma program will emphasize start-up and service skills for oil, gas, and electric furnaces, air-cooled air conditioning, and air-to-air heat pumps.

JOB OPPORTUNITITES

Entry Level

Air Conditioning Mechanic

Heating and Air Conditioning Mechanic

Heating Mechanic

HVAC Service Technician

TOTAL CREDIT HOURS: 71

CURRICULUM BY QUARTERS

Course Title

Hours Per Week

C L P QH

FIRST QUARTER

AHR 1102A	Fundamentals of Refrigeration (Part I)	3	0	3	4
MAT 1102	Algebra	5	0	0	5
PHY 1103	Fundamentals of Electricity	3	2	0	4
		11	2	3	13

SECOND QUARTER

AHR 1102B	Fundamentals of Refrigeration (Part II)	3	0	6	5
ELC 1111	Applied Electricity	3	0	0	3
		6	0	6	8

THIRD QUARTER

AHR 1103A	Domestic and Commercial Refrigeration (Part I)	3	0	6	5
		3	0	6	5

FOURTH QUARTER

AHR 1103B	Domestic and Commercial Refrigeration (Part II)	3	0	6	5
DFT 1107	Blueprint Reading	1	0	3	2
		4	0	9	7

FIFTH QUARTER

AHR 1104	Air Conditioning Controls I	5	0	3	6
ENG 1101	Communications I	3	0	0	3
WLD 1111	Air Conditioning Welding	0	0	3	1
		8	0	6	10

SIXTH QUARTER

AHR 1105	Principles of Air Conditioning	6	0	9	9
		6	0	9	9

SEVENTH QUARTER

AHR 1106	Air Conditioning Controls II	3	0	0	3
ENG 1112	Communications II	3	0	0	3
HET 1101A	Heating Systems (Part I)	3	0	6	5
		9	0	6	11

EIGHTH QUARTER

BUS 1103	Small Business Operations	3	0	0	3
HET 1101B	Heating Systems (Part II)	3	0	6	5
		6	0	6	8

Students may enter this program at times other than the Fall Quarter.

AUTOMOTIVE BODY REPAIR V-001

CURRICULUM DESCRIPTION:

The Automotive Body Repair curriculum provides training in the use of the equipment and materials of the auto body mechanic trade. The student studies the construction of the automobile body and techniques of auto body repairing, rebuilding, and refinishing.

Repairing, straightening, aligning, metal finishing, and painting of automobile bodies and frames are typical jobs performed. Job titles include automobile body repairperson, automotive painter, and frame and chassis repairperson. Persons completing this curriculum may find employment with franchised automobile dealers, independent garages, or may start their own business.

JOB OPPORTUNITIES:

Automobile Accessories Installer
Automobile-Repair-Service Estimator
Appraiser, Automobile Damage
Automatic Window, Seat, and Top Lift Repairer
Painter Helper, Automotive
Painter, Transportation Equipment
Automobile Body Customizer
Automobile Body Repairer

TOTAL CREDIT HOURS: 67

CURRICULUM BY QUARTERS:

Course Title	Hours Per Week			
	C	L	P	QH
FIRST QUARTER				
AUT 1111 Automotive Body Repair I	3	0	12	7
ENG 1101 Communications I	3	0	0	3
MAT 1101 Fundamentals of Mathematics	5	0	0	5
WLD 1130 Applied Basic GMAW and Gas Welding	2	0	6	4
	13	0	18	19
SECOND QUARTER				
AUT 1112 Automotive Body Repair II	3	0	15	8
ENG 1112 Communications II	3	0	0	3
PHY 1101 Applied Science I	3	2	0	4
WLD 1131 Applied Inert Gas Welding and Plasma Cutting	2	0	3	3
	11	2	18	18

THIRD QUARTER

AUT 1113 Metal Finishing and Painting	2	0	12	6
AUT 1114 Frame Straightening and Alignment	4	0	9	7
PSY 1101 Human Relations	3	0	0	3
	9	0	21	16

FOURTH QUARTER

AUT 1116 Automotive and Truck Painting	3	0	21	10
BUS 1103 Small Business Operations	3	0	0	3
DFT 1101 Schematics and Diagrams	0	0	3	1
	6	0	24	14

AUTOMOTIVE MECHANICS V-003

CURRICULUM DESCRIPTION:

The Automotive Mechanics curriculum provides a training program for developing the basic knowledge and skills needed to inspect, diagnose, repair, and adjust automotive vehicles. Manual skills are developed in practical shop work and the technical understanding of the operating principles involved in the modern automobile are taught through class assignments, discussions, and shop practices.

Automobile mechanics maintain and repair mechanical, electrical, and body parts of passenger cars, trucks, and buses. In some communities and rural areas they also may service tractors or marine engines and other gasoline-powered equipment. Mechanics inspect and test to determine the causes of faulty operation. They repair or replace defective parts to restore the vehicle or machine to proper operating condition and use shop manuals and other technical publications as references for technical data. Persons completing this curriculum may find employment with franchised automobile dealers, independent garages, or may start their own business.

JOB OPPORTUNITIES:

Entry Level

General Mechanic

Tune-up Mechanic

Front-end Specialist

Automatic Transmission Specialist

Brake Specialist

Advanced Level

Shop Supervisor

Shop Foreman

TOTAL CREDIT HOURS: 71

CURRICULUM BY QUARTERS:

Course Title	Hours Per Week			
	C	L	P	QH
FIRST QUARTER				
AUT 1130 Basic Electricity	2	0	3	3
AUT 1131 Introduction to Automobile and Shop Equipment	2	2	0	3
AUT 1132 Automotile Fuel Systems and Carburetors	1	0	3	2
AUT 1133 Automobile Brake Systems	2	0	6	4
MAT 1101 Fundamentals of Mathematics	5	0	0	5
	12	2	12	17

SECOND QUARTER

AUT 1135	Automobile Cranking, Charging, and Motor Operated Systems	2	0	6	4
AUT 1136	Automotive Electronics	1	0	3	2
AUT 1137	Automotive Electronic Fuel Injection	1	0	3	2
AUT 1138	Automobile Chassis and Suspension	2	0	6	4
ENG 1101	Communications I	3	0	0	3
PHY 1101	Applied Science I	3	2	0	4
		12	2	18	19

THIRD QUARTER

AUT 1139	Engine Performance with Diagnostics	2	0	6	4
AUT 1140	Automobile Wheel Alignment	1	0	3	2
AUT 1141	Standard Transmissions, Transaxles, and Drive Trains	2	0	6	4
ENG 1112	Communications II	3	0	0	3
HUM 1101	Humanities for Vocational Students	3	0	0	3
WLD 1101	Basic Gas and Arc Welding	1	0	3	2
		12	0	18	18

FOURTH QUARTER

AUT 1142	Automotive Air Conditioning	2	0	3	3
AUT 1143	Basic Engine Operation and Repair	2	0	6	4
AUT 1144	Automotive Emission Controls	2	0	3	3
AUT 1145	Automatic Transmission Servicing	1	0	3	2
BUS 1103	Small Business Operations	3	0	0	3
MEC 1112	Machine Shop Processes	1	0	3	2
		11	0	18	17

AUTOMOTIVE MECHANICS V-003

Evening Curriculum

CURRICULUM DESCRIPTION:

The Automotive Mechanics curriculum provides a training program for developing the basic knowledge and skills needed to inspect, diagnose, repair, and adjust automotive vehicles. Manual skills are developed in practical shop work and the technical understanding of the operating principles involved in the modern automobile are taught through class assignments, discussions, and shop practices.

Automobile mechanics maintain and repair mechanical, electrical, and body parts of passenger cars, trucks, and buses. In some communities and rural areas they also may service tractors or marine engines and other gasoline-powered equipment. Mechanics inspect and test to determine the causes of faulty operation. They repair or replace defective parts to restore the vehicle or machine to proper operating condition and use shop manuals and other technical publications as references for technical data. Persons completing this curriculum may find employment with franchised automobile dealers, independent garages, or may start their own business.

JOB OPPORTUNITIES:

Entry Level

General Mechanic

Tune-up Mechanic

Front-end Specialist

Automatic Transmission Specialist

Brake Specialist

Advanced Level

Shop Supervisor

Shop Foreman

TOTAL CREDIT HOURS: 71

CURRICULUM BY QUARTERS:

Course Title

Hours Per Week

C L P QH

FIRST QUARTER

AUT 1130 Basic Electricity	2	0	3	3
AUT 1131 Introduction to Automobile and Shop Equipment	2	2	0	3
MAT 1101 Fundamentals of Mathematics	5	0	0	5
PHY 1101 Applied Science I	3	2	0	4
	12	4	3	15

SECOND QUARTER

AUT 1132 Auto Fuel Systems and Carburetors	1	0	3	2
AUT 1133 Automobile Brake Systems	2	0	6	4
WLD 1101 Basic Gas and Arc Welding	1	0	3	2
	4	0	12	8

THIRD QUARTER

AUT 1135 Automobile Cranking, Charging, and Motor-Operated System	2	0	6	4
AUT 1138 Automobile Chassis and Suspension	2	0	6	4
	4	0	12	8

FOURTH QUARTER

AUT 1136 Automotive Electronics	1	0	3	2
AUT 1140 Automobile Wheel Alignment	1	0	3	2
AUT 1142 Automotive Air Conditioning	2	0	3	3
MEC 1112 Machine Shop Processes	1	0	3	2
	5	0	12	9

FIFTH QUARTER

AUT 1137 Automobile Electronic Fuel Injection	1	0	3	2
AUT 1139 Engine Performance with Diagnostics	2	0	6	4
ENG 1101 Communications I	3	0	0	3
	6	0	9	9

SIXTH QUARTER

AUT 1143 Basic Engine Operations and Repair	2	0	6	4
AUT 1144 Automotive Emissions Controls	2	0	3	3
	4	0	9	7

SEVENTH QUARTER

AUT 1141 Standard Transmissions, Transaxles, and Drive Trains	2	0	6	4
AUT 1145 Automatic Transmission Servicing	1	0	3	2
BUS 1103 Small Business Operations	3	0	0	3
ENG 1112 Communications II	3	0	0	3
HUM 1101 Humanities for Vocational Students	3	0	0	3
	12	0	9	15

CARPENTRY AND CABINETMAKING V-007

CURRICULUM DESCRIPTION:

Carpenters construct, erect, install, and repair structures of wood, plywood, and wallboard, using hand and power tools. This curriculum in carpentry is designed to prepare individuals with skills and knowledge of construction with wood. The curriculum includes mathematics, blueprint reading, methods of construction, and information on building materials and energy efficient construction.

Carpenters work on new construction and maintain and repair many types of existing structures, both residential and commercial. They have an understanding of building materials, concrete form construction, rough framing, roof and stair construction; the application of interior and exterior trim, insulation, and other energy saving materials; and the installation of cabinets and fixtures.

Most carpenters are employed by contractors in the building construction fields. When specializing in a particular phase of carpentry, the job may be designed according to the specialty as rough carpenter, framing carpenter, form carpenter, scaffolding carpenter, acoustical insulating carpenter, and finish carpenter.

JOB OPPORTUNITIES:

Entry Level

Carpenter
Building Construction Inspector
Roofer
Cabinet Installer
Maintenance Carpenter

Advanced Level (with experience)

Carpenter Foreman
Finish Carpenter
Cabinetmaker

TOTAL CREDIT HOURS: 69

CURRICULUM BY QUARTERS:

Course Title

Hours Per Week

C	L	P	QH
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FIRST QUARTER

CAR 1101 Carpentry I	5	0	15	10
DFT 1110 Blueprint Reading I	0	0	3	1
ENG 1101 Communications I	3	0	0	3
MAT 1101 Fundamentals of Mathematics	5	0	0	5
	13	0	18	19

SECOND QUARTER

CAR 1102 Carpentry II	5	0	15	10
DFT 1111 Blueprint Reading II	0	0	3	1
MAT 1114 Carpenter's Mathematics	5	0	0	5
PSY 1101 Human Relations	3	0	0	3
	13	0	18	19

THIRD QUARTER

BUS 1103 Small Business Operations	3	0	0	3
CAR 1103 Carpentry III	5	0	15	10
CAR 1114 Building Codes	3	0	0	3
	11	0	15	16

FOURTH QUARTER

CAR 1105 Carpentry IV	5	0	15	10
CAR 1115 Estimating for Residential Construction	2	0	0	2
ENG 1112 Communications II	3	0	0	3
	10	0	15	15

DIESEL VEHICLE MAINTENANCE V-013

CURRICULUM DESCRIPTION:

The Diesel Vehicle Maintenance curriculum provides a program for developing the basic knowledge and skills needed in diesel vehicle maintenance. Manual skills are developed in practical shop work.

The use of diesel engines are found in farm and construction equipment, electric generators, trucks, buses, trains, automobiles, and ships. Many diesel vehicle mechanics specialize in maintenance and repair of equipment; others specialize in rebuilding engines.

Diesel vehicle mechanics are instructed through class assignments, discussion, and shop practice to maintain and repair engines, chassis and suspensions, and power trains used to power farm equipment, construction equipment, buses, and trucks. They use handtools, precision measuring and testing instruments, and power tools in overhauling and maintaining diesel-powered equipment.

JOB OPPORTUNITIES:

Diesel Mechanic	Repairer, Heavy
Diesel Mechanic Apprentice	Construction Equipment Mechanic Helper
Diesel Mechanic Helper	Spring Repairer Helper, Hand
Fuel-Injection Servicer	Maintenance Mechanic Helper
Tractor Mechanic Helper	

TOTAL CREDIT HOURS: 75

CURRICULUM BY QUARTERS:

Course Title	Hours Per Week			
	C	L	P	QH
FIRST QUARTER				
DFT 1101 Schematics and Diagrams	0	0	3	1
DVM 1110 Introduction to Diesel	1	0	3	2
DVM 1111 Vehicle Servicing	3	0	9	6
DVM 1112 Basic Electricity	2	0	3	3
DVM 1113 Air Brakes	2	0	3	3
MAT 1101 Fundamentals of Mathematics	5	0	0	5
	13	0	21	20
SECOND QUARTER				
DVM 1114 Diesel Engines	4	0	15	9
DVM 1115 Drive Trains	2	0	6	4
ELN 1110 Basic Electronics	1	0	3	2
PHY 1102 Applied Science II	3	2	0	4
	10	2	24	19

THIRD QUARTER

DVM 1116 Suspension and Steering	2	0	6	4
DVM 1117 Truck Charging and Starting Systems	2	0	6	4
DVM 1119 Diesel Fuel Systems	2	0	6	4
ENG 1112 Communications II	3	0	0	3
HUM 1101 Humanities for Vocational Students	3	0	0	3
WLD 1101 Basic Gas and Arc Welding	1	0	3	2
	13	0	21	20

FOURTH QUARTER

BUS 1103 Small Business Operations	3	0	0	3
DVM 1118 Truck Electrical Systems	1	0	6	3
DVM 1120 Diesel Truck Maintenance	2	0	6	4
DVM 1121 Truck Air Conditioning	2	0	3	3
MEC 1120 Machine Processes	1	0	6	3
	9	0	21	16

ELECTRICAL INSTALLATION AND MAINTENANCE V-018

CURRICULUM DESCRIPTION:

The Electrical Installation and Maintenance curriculum is designed to provide a training program in the basic knowledge, fundamentals, and practices involved in the electrical trades. A large segment of the program is laboratory and shop instruction designed to give the student practical knowledge and application experience in the fundamentals taught in class.

The graduate of this curriculum is qualified to enter an electrical trade as an on-the-job trainee or apprentice, assisting in the layout, installation, check out, and maintenance of systems in residential, commercial, or industrial settings.

JOB OPPORTUNITIES:

Entry Level

Electrical Apprentice

Advanced Level

Electrician

TOTAL CREDIT HOURS: 77

CURRICULUM BY QUARTERS:

Course Title

Hours Per Week

C L P QH

FIRST QUARTER

ELC 1121	Electrical Installation Fundamentals	7	0	15	12
MAT 1101	Fundamentals of Mathematics	5	0	0	5
PHY 1103	Fundamentals of Electricity	3	2	0	4
		15	2	15	21

SECOND QUARTER

DFT 1110	Blueprint Reading I	0	0	3	1
ELC 1122	Residential Wiring I	7	0	15	12
ENG 1101	Communications I	3	0	0	3
PHY 1102	Applied Science II	3	2	0	4
		13	2	18	20

THIRD QUARTER

DFT 1113	Blueprint Reading: Electrical	0	0	3	1
ELC 1123	Residential Wiring II	6	0	15	11
ENG 1112	Communications II	3	0	0	3
PSY 1101	Human Relations	3	0	0	3
		12	0	18	18

FOURTH QUARTER

BUS 1103	Small Business Operations	3	0	0	3
ELC 1125	Commercial and Industrial Wiring	6	0	15	11
ELN 1118	Industrial Electronics	3	0	3	4
		12	0	18	18

ELECTRONIC SERVICING - ADVANCED V-042A

CURRICULUM DESCRIPTION:

The curriculum in Electronic Servicing is designed to provide basic knowledge and skills required in the installation, maintenance and servicing of electronic components and system. Laboratory time will be spent verifying electronic theory and principles, and learning installation, maintenance, and service techniques.

An electronic service technician will be able to install, maintain, and service electronic equipment, including radios, television, audio/video recording and playback equipment, home entertainment systems, digital electronic systems, Master Antenna Television, and cable television components and systems.

ADVANCED DIPLOMA:

The Advance Diploma program provides for more in-depth studies of electronics and testing procedures. It also provides for advance skill development in areas such as digital logic circuits, VCR, and compact disc servicing.

ADMISSIONS REQUIREMENTS:

Applicants must be graduates of a one-year electronic servicing program (diploma) or have comparable experience. The work experience will be evaluated by the chairperson of the electronic servicing program.

TOTAL CREDIT HOURS: 27

Course Title	Hours Per Week			
	C	L	P	QH
BUS 1103 Small Business Operations	3	0	0	3
ELN 1125 (A) Digital Logic Circuits	3	0	6	5
ELN 1125 (B) Digital Logic Circuits	2	0	3	3
ELN 1126 (A) VCR Servicing	3	0	6	5
ELN 1126 (B) VCR Servicing	2	0	3	3
ELN 1127 (A) Compact Disc Servicing	3	0	6	5
ELN 1127 (B) Compact Disc Servicing	2	0	3	3
	18	0	27	27

ELECTRONIC SERVICING V-042

CURRICULUM DESCRIPTION:

The curriculum in Electronic Servicing is designed to provide basic knowledge and skills required in the installation, maintenance, and servicing of electronic components and systems. Laboratory time will be spent verifying electronic theory and principles, and learning installation, maintenance, and service techniques.

An electronic service technician will be able to install, maintain, and service electronic equipment, including radios, television, audio/video recording and playback equipment, home entertainment systems, digital electronic systems, Master Antenna Television, and cable television components and systems.

JOB OPPORTUNITIES:

Electronic Service Technician
Audio/Video Service Technician
Radio Service Technician
Television Service Technician

TOTAL CREDIT HOURS: 71

CURRICULUM BY QUARTERS:

Course Title

Hours Per Week

C L P QH

FIRST QUARTER

ELC 1120 Direct and Alternating Current

7 0 15 12

ENG 1101 Communications I

3 0 0 3

MAT 1115 Elements of Mathematics I

5 0 0 5

15 0 15 20

SECOND QUARTER

ELN 1121 Solid State Devices and Circuits

5 0 9 8

ELN 1122 Transistor Theory and Circuits

4 0 9 7

MAT 1116 Elements of Mathematics II

3 0 0 3

12 0 18 18

THIRD QUARTER

ELN 1123 Black and White Television Servicing

7 0 18 13

PHY 1104 Applied Science IV

3 2 0 4

10 2 18 17

FOURTH QUARTER

ELN 1124 Color Television Servicing

6 0 21 13

HUM 1101 Humanities for Vocational Students

3 0 0 3

9 0 21 16

GRAPHIC ARTS - PRINTING V-022

CURRICULUM DESCRIPTION:

This curriculum gives individuals experience with equipment and a working knowledge of methods used in the graphic arts industry. Ample opportunities are provided for students to develop skills in the operation of machines and equipment and to become familiar with a wide range of graphic processes.

There are many distinct occupations in the graphic arts industry. Graduates will be able to set type by various methods, prepare copy and artwork, proofread, operate presses, understand the photomechanical process, operate bindery equipment and perform a variety of other graphic arts skills.

JOB OPPORTUNITIES:

Printer
Printer Helper
Press Operator
Press Operator Apprentice
Paste-up Artist
Camera Process Operator
Image Assembler
Type Setter

TOTAL CREDIT HOURS: 74

CURRICULUM BY QUARTERS:

Course Title	Hours Per Week			
	C	L	P	QH
FIRST QUARTER				
BUS 1122 Vocational Keyboarding	3	0	0	3
EDP 1101 Desktop Publishing for Graphic Arts	3	0	0	3
MAT 1150 Printer's Mathematics	5	0	0	5
PRN 1131 Introduction to Printing	6	0	12	10
	17	0	12	21
SECOND QUARTER				
PHY 1114 Science for Printers	3	2	0	4
PRN 1132 Offset Printing I	4	0	12	8
PRN 1134 Composition I	3	0	6	5
	10	2	18	17
THIRD QUARTER				
ENG 1101 Communications I	3	0	0	3
PRN 1133 Offset Printing II	6	0	15	11
PRN 1135 Composition II	3	0	3	4
	12	0	18	18
FOURTH QUARTER				
BUS 1103 Small Business Operations	3	0	0	3
ENG 1112 Communications II	3	0	0	3
PRN 1136 Estimating	5	0	0	5
PRN 1137 Printing Project	0	0	21	7
	11	0	21	18

MACHINIST V-032

CURRICULUM DESCRIPTION:

The Machinist curriculum gives individuals the opportunity to acquire basic skills and related technical information necessary to gain employment in the metalworking industries. The machinist is a skilled metalworker who shapes metal by using machine tools and hand tools. Machinists must be able to set up and operate the machine tools found in a modern shop. Computer Numerical Control (CNC) may be integrated into various phases of the curriculum or as specialized courses.

The machinist is able to select the proper tools and materials required for each job and to plan the cutting and finishing operations in their proper order so that the work can be finished according to blueprint or written specifications. The machinist makes computations relating to dimensions of work, tooling, feeds, and speeds of machining. Precision measuring instruments are used to measure the accuracy of work. The machinist also must know the characteristics of metals so that annealing and hardening of tools and metal parts can be accomplished in the process of turning a block of metal into an intricate, precise part.

JOB OPPORTUNITIES:

Entry Level

Machinist Apprentice
Tool and Die Maker Apprentice
Machine Set-up Operator
Quality Control Technician
Production Machine Operator
CNC Set-up Operators

Advanced Level

Machinist
Maintenance Machinist

TOTAL CREDIT HOURS: 69

CURRICULUM BY QUARTERS:

Course Title

Hours Per Week

C	L	P	QH
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FIRST QUARTER

DFT 1104 Mechanical Drawing I	1	0	3	2
HUM 1101 Humanities for Vocational Students	3	0	0	3
MAT 1101 Fundamentals of Mathematics	5	0	0	5
MEC 1101 Machine Shop Theory and Practice I	4	0	12	8
	13	0	15	18

SECOND QUARTER

DFT 1105 Mechanical Drawing II	1	0	3	2
MAT 1102 Algebra	5	0	0	5
MEC 1102 Machine Shop Theory and Practice II	4	0	12	8
MEC 1115 Metallurgy for Machinists	2	0	3	3
	12	0	18	18

THIRD QUARTER

DFT 1106 Mechanical Drawing III	1	0	3	2
ENG 1112 Communications II	3	0	0	3
MAT 1103 Geometry	3	0	0	3
MEC 1103 Machine Shop Theory and Practice III	3	0	12	7
MEC 1113 CNC Lathe Operation	1	0	3	2
	11	0	18	17

FOURTH QUARTER

MAT 1104 Trigonometry	3	0	0	3
MEC 1104 Machine Shop Theory and Practice IV	3	0	12	7
MEC 1114 CNC Milling Machine Operation	1	0	3	2
PHY 1101 Applied Science I	3	2	0	4
	10	2	15	16

MACHINIST V-032

Evening Curriculum

CURRICULUM DESCRIPTION:

The Machinist curriculum gives individuals the opportunity to acquire basic skills and related technical information necessary to gain employment in the metalworking industries. The machinist is a skilled metalworker who shapes metal by using machine tools and hand tools. Machinists must be able to set up and operate the machine tools found in a modern shop. Computer Numerical Control (CNC) may be integrated into various phases of the curriculum or as specialized courses.

The machinist is able to select the proper tools and materials required for each job and to plan the cutting and finishing operations in their proper order so that the work can be finished according to blueprint or written specifications. The machinist makes computations relating to dimensions of work, tooling, feeds and speeds of machining. Precision measuring instruments are used to measure the accuracy of work. The machinist also must know the characteristics of metals so that annealing and hardening of tools and metal parts can be accomplished in the process of turning a block of metal into an intricate, precise part.

JOB OPPORTUNITIES:

Entry Level

Machinist Apprentice
Tool and Die Maker Apprentice
Machine Set-up Operator
Quality Control Technician
Production Machine Operator
CNC Set-up Operators

Advanced Level

Machinist
Maintenance Machinist

TOTAL CREDIT HOURS: 69

CURRICULUM BY QUARTERS

Course Title

Hours Per Week
C L P QH

FIRST QUARTER

HUM 1101	Humanities for Vocational Students	3	0	0	3
MAT 1101	Fundamentals of Mathematics	5	0	0	5
MEC 1101A	Machine Shop Theory and Practice I (Part I)	2	0	6	4
		10	0	6	12

SECOND QUARTER

ENG 1112	Communications II	3	0	0	3
MAT 1102	Algebra	5	0	0	5
MEC 1101B	Machine Shop Theory and Practice I (Part II)	2	0	6	4
		10	0	6	12

THIRD QUARTER

MAT 1103	Geometry	3	0	0	3
MEC 1102A	Machine Shop Theory and Practice II (Part I)	2	0	6	4
MEC 1115	Metallurgy for Machinists	2	0	3	3
		7	0	9	10

FOURTH QUARTER

MAT 1104	Trigonometry	3	0	0	3
MEC 1102B	Machine Shop Theory and Practice II (Part II)	2	0	6	4
PHY 1101	Applied Science I	3	2	0	4
		8	2	6	11

FIFTH QUARTER

DFT 1104	Mechanical Drawing I	1	0	3	2
MEC 1103A	Machine Shop Theory and Practice III (Part I)	2	0	6	4
MEC 1113	CNC Lathe Operation	1	0	3	2
		4	0	12	8

SIXTH QUARTER

DFT 1105	Mechanical Drawing II	1	0	3	2
MEC 1103B	Machine Shop Theory and Practice III (Part II)	1	0	6	3
MEC 1114	CNC Milling Machine Operation	1	0	3	2
		3	0	12	7

SEVENTH QUARTER

MEC 1104	Machine Shop Theory and Practice IV	3	0	12	7
DFT 1106	Mechanical Drawing III	1	0	3	2
		4	0	15	9

PLUMBING AND PIPEFITTING V-037

CURRICULUM DESCRIPTION:

The Plumbing and Pipefitting curriculum is designed to train individuals to repair or install plumbing systems in residences and small commercial buildings. Courses in plumbing practices and pipefitting are included to provide practical experience, as well as courses in theory that one must know to advance and keep up to date with innovations. Other courses in communication skills, physics, human relations, and business operations are provided to assist the individual in occupational growth.

Plumbers are employed by contractors in the building construction fields to install pipe systems which carry water, steam, air, or other liquids or gases for sanitation, heating, industrial production, and various other uses. They also alter and repair existing pipe systems and install plumbing fixtures, appliances, and heating and refrigeration units.

JOB OPPORTUNITIES:

Entry Level

Plumber (Apprentice)

Pipefitter (Apprentice)

Advanced Level (with experience)

Plumber

Pipefitter

Foreman or Supervisor

TOTAL CREDIT HOURS: 68

CURRICULUM BY QUARTERS

Course Title

Hours Per Week

C L P QH

FIRST QUARTER

DFT 1110	Blueprint Reading I
MAT 1101	Fundamentals of Mathematics
PLU 1131	Plumbing I

0	0	3	1
5	0	0	5
8	0	15	13
13	0	18	19

SECOND QUARTER

ENG 1101	Communications I
PHY 1101	Applied Science I
PLU 1132	Plumbing II
WLD 1101	Basic Gas and Arc Welding

3	0	0	3
3	2	0	4
3	0	15	8
1	0	3	2
10	2	18	17

THIRD QUARTER

DFT	1112	Drafting I: Plumbing	1	0	3	2
PLU	1133	Plumbing III	5	0	18	11
PSY	1101	Human Relations	3	0	0	3
			9	0	21	16

FOURTH QUARTER

BUS	1103	Small Business Operations	3	0	0	3
ENG	1112	Communications II	3	0	0	3
PLU	1134	Plumbing IV	3	0	21	10
			9	0	21	16

PRACTICAL NURSE EDUCATION V-038

CURRICULUM DESCRIPTION:

Practical Nurse Education curriculum graduates are prepared to take the National Council Licensure Examination required to practice as a Licensed Practical Nurse. The Practical Nurse Education curriculum is designed to develop competencies in the following five components of practice, as defined by the North Carolina Nursing Practice Act, 1987: (1) participating in assessing the client's physical and mental health including the client's reaction to illnesses and treatment regimens; (2) recording and reporting the results of the nursing assessment; (3) participating in implementing the health care plan developed by the registered nurse and/or prescribed by any person authorized by state law to prescribe such a plan, by performing tasks delegated by and performed under the supervision or under orders or directions of a registered nurse, physician licensed to practice medicine, dentist, or other person authorized by state law to provide such supervision; (4) reinforcing the teaching and counseling of a registered nurse, physician licensed to practice medicine in North Carolina, or dentist; and (5) reporting and recording the nursing care rendered and the client's response to that care.

Licensed Practical Nurses may be employed in hospitals, nursing homes, clinics, doctors' offices, industry, and public health agencies.

Individuals desiring a career in practical nursing should be encouraged to take math and science courses in high school.

JOB OPPORTUNITIES:

Nurse, Licensed Practical (DOT 079.374-014)

TOTAL CREDIT HOURS: 78

CURRICULUM BY QUARTERS:

Course Title

Hours Per Week

C L P QH

FIRST QUARTER

NUT 101 General Nutrition
and Diet Therapy

3 0 0 3

PNE 1103 Anatomy and Physiology

4 0 0 4

PNE 1105 Drug Administration I

3 0 0 3

PNE 1301 Fundamentals of Nursing

7 6 0 10

PSY 101 Psychology

3 0 0 3

20 6 0 23

SECOND QUARTER

PNE 1111 Drug Administration II	4	0	0	4
PNE 1302 Medical-Surgical Nursing I	9	0	15	14
	13	0	15	18

THIRD QUARTER

ENG 101 Introduction to Written Communication	3	0	0	3
PNE 1303 Maternity-Newborn Nursing (1/2 quarter)	8	4	12	7
PNE 1304 Child Health Nursing (1/2 quarter)	8	4	12	7
	11	4	12	17

FOURTH QUARTER

ENG 102 Composition	3	0	0	3
PNE 1305 Medical-Surgical Nursing II	9	0	15	14
PNE 1306 Nursing Seminar	3	0	0	3
	15	0	15	20

WELDING V-050

CURRICULUM DESCRIPTION:

The Welding curriculum gives students sound knowledge of the principles, methods, techniques, and skills essential for successful employment in the welding field and metals industry. Welders join metals by applying intense heat, and sometimes pressure, to form a permanent bond between intersecting metals.

Welding offers employment in practically any industry: shipbuilding, automotive, aircraft, guided missiles, heavy equipment, railroads, construction, pipefitting, production shops, job shops, and many others.

JOB OPPORTUNITIES:

Entry Level

Arc Welder
Arc Welding - Machine Operator
Gas Welding - Machine Operator
Gas Welder
Welder - Assembler
Combination Welder

Advanced Level

Lay-out Worker I
Welder - Fitter

TOTAL CREDIT HOURS: 68

CURRICULUM BY QUARTERS:

Course Title

Hours Per Week

C	L	P	QH
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FIRST QUARTER

DFT 1104 Mechanical Drawing I	1	0	3	2
MAT 1101 Fundamentals of Mathematics	5	0	0	5
PSY 1101 Human Relations	3	0	0	3
WLD 1120 Oxyacetylene Welding and Cutting	2	0	6	4
WLD 1129 Basic Gas Metal Arc Welding	2	0	9	5
	13	0	18	19

SECOND QUARTER

DFT 1117 Blueprint Reading: Welding	0	0	3	1
ENG 1101 Communications I	3	0	0	3
PHY 1103 Fundamentals of Electricity	3	2	0	4
WLD 1121 Basic Arc Welding	4	0	15	9
	10	2	18	17

THIRD QUARTER

MAT 1103 Geometry	3	0	0	3
MEC 1117 Metallurgy for Welders	2	0	3	3
WLD 1123 Inert Gas Welding	1	0	6	3
WLD 1124 Advanced Arc Welding	3	0	12	7
	9	0	21	16

FOURTH QUARTER

ENG 1112 Communications II	3	0	0	3
MEC 1112 Machine Shop Processes	1	0	3	2
WLD 1113 Mechanical Testing and Inspection	1	0	3	2
WLD 1126 Advanced Inert Gas Welding	3	0	9	6
WLD 1128 Welding Procedures and Practices	1	0	6	3
	9	0	21	16

WELDING V-050

Evening Program

CURRICULUM DESCRIPTION:

The Welding curriculum gives students sound knowledge of the principles, methods, techniques, and skills essential for successful employment in the welding field and metals industry. Welders join metals by applying intense heat, and sometimes pressure, to form a permanent bond between intersecting metals.

Welding offers employment in practically any industry: shipbuilding, automotive, aircraft, guided missiles, heavy equipment, railroads, construction, pipefitting, production shops, job shops, and many others.

JOB OPPORTUNITIES:

Entry Level

Arc Welder

Arc Welding - Machine Operator

Gas Welding - Machine Operator

Gas Welder

Welder - Assembler

Combination Welder

Advanced Level

Lay-out Worker I

Welder - Fitter

TOTAL CREDIT HOURS: 68

CURRICULUM BY QUARTERS:

Course Title

Hours Per Week

C L P QH

FIRST QUARTER

DFT 1104 Mechanical Drawing I

1 0 3 2

PHY 1103 Fundamentals of Electricity

3 2 0 4

WLD 1120 Oxyacetylene Welding and
Cutting

2 0 6 4

6 2 9 10

SECOND QUARTER

MAT 1101 Fundamentals of Mathematics

5 0 0 5

WLD 1129 Basic Gas Metal Arc Welding

2 0 9 5

7 0 9 10

THIRD QUARTER

DFT 1117 Blueprint Reading: Welding

0 0 3 1

ENG 1101 Communications I

3 0 0 3

WLD 1121A Basic Arc Welding (Part I)

2 0 6 4

5 0 9 8

FOURTH QUARTER

PSY 1101	Human Relations	2	0	3	3
WLD 1121B	Basic Arc Welding (Part II)	2	0	9	5
		4	0	12	8

FIFTH QUARTER

MEC 1117	Metallurgy for Welders	2	0	3	3
WLD 1124A	Advanced Arc Welding (Part I)	2	0	9	5
		4	0	12	8

SIXTH QUARTER

MEC 1112	Machine Shop Processes	1	0	3	2
WLD 1123	Inert Gas Welding	1	0	6	3
WLD 1124B	Advanced Arc Welding (Part II)	1	0	3	2
		3	0	12	7

SEVENTH QUARTER

ENG 1112	Communications II	3	0	0	3
WLD 1126	Advanced Inert Gas Welding	3	0	9	6
		6	0	9	9

EIGHTH QUARTER

MAT 1103	Geometry	3	0	0	3
WLD 1113	Mechanical Testing and Inspection	1	0	3	2
WLD 1128	Welding Procedures and Practices	1	0	6	3
		5	0	9	8

WELDING - ADVANCED V-050A

CURRICULUM DESCRIPTION:

The Welding curriculum gives students sound knowledge of the principles, methods, techniques, and skills essential for successful employment in the welding field and metals industry. Welders join metals by applying intense heat, and sometimes pressure, to form a permanent bond between intersecting metals.

Welding offers employment in practically any industry: shipbuilding, automotive, aircraft, guided missiles, heavy equipment, railroads, construction, pipefitting, production shops, job shops, and many others.

ADVANCED DIPLOMA:

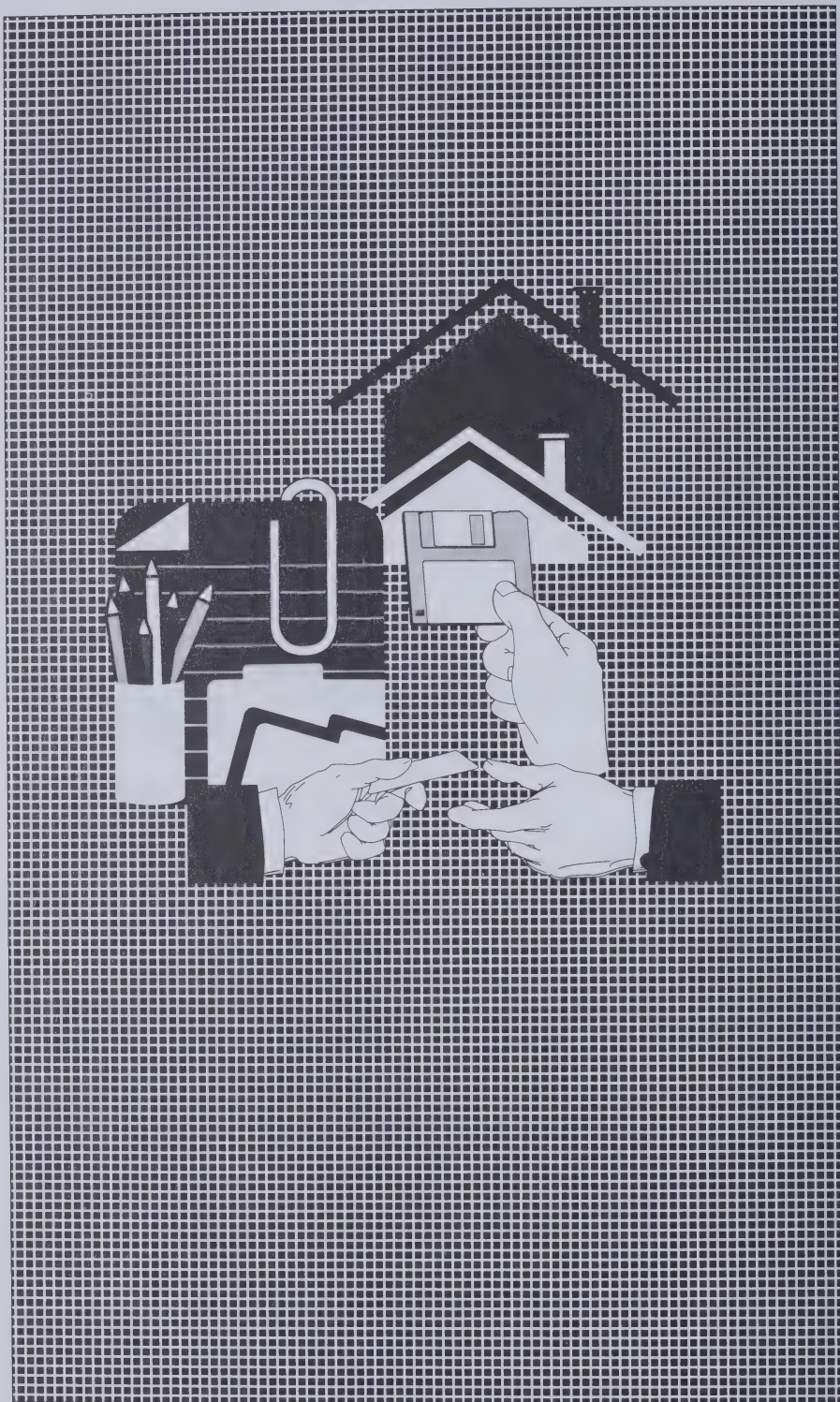
Advanced-diploma level programs provide for more in-depth studies of metallurgy, nondestructive testing procedures, welding power sources, automated welding systems, and other technological developments. They also provide for advanced skill development in areas such as fabrication and welding pipe and tubing.

ADMISSIONS REQUIREMENTS:

Applicants must be graduates of a one-year welding program (diploma) or have comparable experience. The work experience will be evaluated by the chairperson of the welding program.

TOTAL CREDIT HOURS: 35

Course Title	Hours Per Week			
	C	L	P	QH
MEC 1115 Metallurgy for Machinists	2	0	3	3
WLD 1140 Welding Power Sources	3	0	3	4
WLD 1141 Advanced Wire Welding	2	0	6	4
WLD 1142 Nondestructive Testing I	3	0	3	4
WLD 1143 Nondestructive Testing II	3	0	3	4
WLD 1144 Welding Fabrication I	2	0	3	3
WLD 1145 Welding Fabrication II	2	0	3	3
WLD 1146 Robotic Programming for Welding	1	0	6	3
WLD 1147 Pipe and Tube Welding	3	0	12	7
	21	0	42	35



CERTIFICATE PROGRAMS

Certificate programs are especially designed educational plans of study drawn from existing curricula for persons who desire to improve their job skills in a particular area of interest.

The programs are also designed to meet the needs of employers in upgrading the occupational skills of their employees. Each certificate program may be tailored toward the requirements of a specific business, industry, or organization.

BENEFITS:

Short program-- 3 or 4 quarters

Practical application -- immediate hands-on and real-world application

Training on newest equipment -- IBM electronic typewriters, AT&T personal computers, and IBM personal computers

Software used -- Lotus 1, 2, 3
Wordstar
dBase II, III

N. C. FUNERAL DIRECTOR CERTIFICATE PROGRAM T-057C

Note:

This academic program is designed to meet specific N. C. state needs. It is not accredited by the American Board of Funeral Service Education. Students graduating from this program are not eligible to take the National Board Examination, nor any state board examination for which graduation from an ABFSE accredited program is required.

Forsyth Technical Community College/Fayetteville Technical Community College

DESCRIPTION:

The Funeral Director Certificate Program provides students with the opportunity to acquire the funeral directing education necessary to become proficient in basic funeral directing skills.

Graduates of the certificate program will qualify to take the North Carolina Funeral Director's Examination; and if successful, following a one-year internship at a North Carolina funeral home, will be awarded a North Carolina Funeral Director's License.

Upon completion of the program, the student will receive a Certificate of Achievement.

TOTAL CREDIT HOURS: 50

CURRICULUM BY QUARTERS:

Course Title		Hours Per Week			
		C	L	P	QH
FIRST QUARTER					
BUS 115	Business Law I	3	0	0	3
EDP 103	Introduction to Microcomputing DOS	3	0	0	3
ENG 100	Oral Communication	3	0	0	3
FSE 101F	Introduction to Funeral Service	3	0	0	3
		12	0	0	12
SECOND QUARTER					
BUS 116	Business Law II	3	0	0	3
FSE 121F	Funeral Service Practices	3	0	0	3
FSE 257F	Pathology I	3	0	0	3
PSY 101	Psychology	3	0	0	3
		12	0	0	12

THIRD QUARTER

FSE 224F	Funeral Home Operations	4	0	0	4
FSE 268F	Funeral Counseling	3	0	0	3
SOC 103	Sociology	3	0	0	3
		10	0	0	10

FOURTH QUARTER

FSE 115F	Funeral Service Law	3	0	0	3
PSY 241F	Grief Psychology	5	0	0	5
		8	0	0	8

FALL QUARTER

BUS 120	Accounting I	4	3	0	5
BUS 200	How to Start Your Own Business	3	0	0	3
		7	3	0	8

CERTIFICATE IN CLERICAL PROCESSING T-033C

DESCRIPTION:

The purpose of the Certificate in Clerical Processing is to provide intensive clerical training through the development of such core skills as keyboarding, word processing, and microcomputing.

TOTAL CREDIT HOURS: 24

CURRICULUM BY QUARTERS:

Course Title

Hours Per Week

C L P QH

FIRST QUARTER

BUS 102	Keyboarding	3	2	0	4
EDP 103	Introduction to Microcomputing DOS	3	0	0	3
ENG 111	Grammar Skills	3	0	0	3
		9	2	0	10

SECOND QUARTER

BUS 103	Document Formatting	3	2	0	4
BUS 240	Introductory Word Processing on Microcomputers	2	0	3	3
		5	2	3	7

THIRD QUARTER

BUS 104	Document Production/Word Processing	3	2	0	4
BUS 211	Reprographics	2	0	3	3
		5	2	3	7

CERTIFICATE IN COBOL PROGRAMMING T-022C

DESCRIPTION:

The purpose of the certificate in COBOL Programming is to provide programming logic for program development and an intense study of the COBOL programming language.

TOTAL CREDIT HOURS: 36

CURRICULUM BY QUARTERS:

Course Title	Hours Per Week			
	C	L	P	QH
FIRST QUARTER				
EDP 100 Introduction to Data Processing	3	2	0	4
EDP 107 Logic and Decision Making I	3	0	0	3
	6	2	0	7
SECOND QUARTER				
EDP 108 Logic and Decision Making II	3	0	0	3
MAT 117 EDP Mathematics	5	0	0	5
	8	0	0	8
THIRD QUARTER				
EDP 110 COBOL Programming I	3	2	0	4
BUS Elective	3	0	0	3
	6	2	0	7
FOURTH QUARTER				
EDP 111 COBOL Programming II	4	2	0	5
EDP 201 Computer Systems	3	2	0	4
	7	4	0	9
FIFTH QUARTER				
EDP 112 COBOL Programming III	4	2	0	5
	4	2	0	5

CERTIFICATE IN CUSTOMER SERVICE T-020C

(Marketing / Retailing)

DESCRIPTION:

The purpose of the Certificate in Customer Service is to prepare students for employment in positions that interact with customers.

TOTAL CREDIT HOURS: 18

CURRICULUM BY QUARTERS:

Course Title	Hours Per Week			
	C	L	P	QH
FIRST QUARTER				
ENG 100 Oral Communication	3	0	0	3
BUS 232 Sales Development	3	0	0	3
	<u>6</u>	<u>0</u>	<u>0</u>	<u>6</u>
SECOND QUARTER				
BUS 100 Basic Keyboarding	3	0	0	3
ENG 111 Grammar Skills	3	0	0	3
	<u>6</u>	<u>0</u>	<u>0</u>	<u>6</u>
THIRD QUARTER				
BUS 131 Human Relations Skills in Organizations	3	0	0	3
EDP 103 Introduction to Microcomputing (DOS)	3	0	0	3
	<u>6</u>	<u>0</u>	<u>0</u>	<u>6</u>

CERTIFICATE IN DIESEL VEHICLE MAINTENANCE V-013C

TOTAL CREDIT HOURS: 53

CURRICULUM BY QUARTERS:

Course Title		Hours Per Week			
		C	L	P	QH
FIRST QUARTER					
DVM 1110	Introduction to Diesel	1	0	3	2
DVM 1111	Vehicle Servicing	3	0	9	6
		4	0	12	8
SECOND QUARTER					
DVM 1112	Basic Electricity	2	0	3	3
DVM 1113	Air Brakes	2	0	3	3
WLD 1101	Basic Gas and Arc Welding	1	0	3	2
		5	0	9	8
THIRD QUARTER					
DVM 1114A	Diesel Engines	2	0	6	4
DVM 1119	Diesel Fuel Systems	2	0	6	4
		4	0	12	8
FOURTH QUARTER					
DVM 1114B	Diesel Engines	2	0	9	5
DVM 1121	Truck Air Conditioning	2	0	3	3
		4	0	12	8
FIFTH QUARTER					
DVM 1116	Suspension and Steering	2	0	6	4
DVM 1117	Truck Charging and Starting Systems	2	0	6	4
		4	0	12	8
SIXTH QUARTER					
DVM 1115	Drive Trains	2	0	6	4
DVM 1118	Truck Electrical Systems	1	0	6	3
		3	0	12	7
SEVENTH QUARTER					
ELN 1110	Basic Electronics	1	0	3	2
DVM 1120	Diesel Truck Maintenance	2	0	6	4
		3	0	9	6

CERTIFICATE IN MEDICAL TRANSCRIPTION T-033M

DESCRIPTION:

The Certificate in Medical Transcription is designed to provide the individual with the knowledge and skills necessary for employment as a medical transcriptionist. This objective is fulfilled through study and application in transcribing medical records, transcribing correspondence from machines, and filing of correspondence, records, and other data.

TOTAL CREDIT HOURS: 24

CURRICULUM BY QUARTERS:

Course Title	Hours Per Week			
	C	L	P	QH
FIRST QUARTER				
BUS 102 Keyboarding	3	2	0	4
BUS 141 Medical Vocabulary and Terminology	3	0	0	3
ENG 111 Grammar Skills	3	0	0	3
	9	2	0	10
SECOND QUARTER				
BUS 103 Document Formatting	3	2	0	4
BUS 240 Introductory Word Processing on Microcomputers	2	0	3	3
	5	2	3	7
THIRD QUARTER				
BUS 112 Machine Transcription I	3	2	0	4
EDP 103 Introduction to Microcomputing DOS	3	0	0	3
	6	2	0	7

CERTIFICATE IN MICROCOMPUTING T-018A
(Accounting)

DESCRIPTION:

The Certificate in Microcomputing (Accounting) is designed for individuals desiring knowledge and skills in the application of accounting theories and principles utilizing financial spreadsheet and accounting software.

TOTAL CREDIT HOURS: 43

CURRICULUM BY QUARTERS:

Course Title		Hours Per Week			
		C	L	P	QH
FIRST QUARTER					
BUS 100	Basic Keyboarding	3	0	0	3
BUS 120	Accounting I	4	0	3	5
EDP 102	Microcomputer Concepts	3	0	0	3
EDP 103	Introduction to Microcomputing DOS	3	0	0	3
		13	0	3	14
SECOND QUARTER					
BUS 121	Accounting II	4	0	3	5
BUS 280	Microcomputer Accounting Applications: General Ledger	3	0	0	3
EDP 152	Financial Spreadsheet Operations I	3	0	0	3
		10	0	3	11
THIRD QUARTER					
BUS 281	Microcomputer Accounting Applications: Accounts Receivable/Payable	3	0	0	3
EDP 156	Microcomputer Graphics	3	0	0	3
EDP 162	Financial Spreadsheet Operations II	3	0	0	3
		9	0	0	9
FOURTH QUARTER					
BUS 282	Microcomputer Accounting Applications: Payroll/Inventory	3	0	0	3
EDP 172	Financial Spreadsheet Operations III	3	0	0	3
	Microcomputer Elective	3	0	0	3
		9	0	0	9

CERTIFICATE IN MICROCOMPUTING T-018B

(Business)

DESCRIPTION:

The Certificate in Microcomputing (Business) is designed for individuals desiring a concentrated knowledge of database management and financial spreadsheet software and their application in the business environment.

TOTAL CREDIT HOURS: 36

CURRICULUM BY QUARTERS:

Course Title		Hours Per Week			
		C	L	P	QH
FIRST QUARTER					
BUS 100	Basic Keyboarding	3	0	0	3
EDP 102	Microcomputer Concepts	3	0	0	3
EDP 103	Introduction to Microcomputing DOS	3	0	0	3
		9	0	0	9
SECOND QUARTER					
EDP 150	Database Management Systems I	3	0	0	3
EDP 152	Financial Spreadsheet Operations I	3	0	0	3
	Microcomputer Elective	3	0	0	3
		9	0	0	9
THIRD QUARTER					
EDP 156	Microcomputer Graphics	3	0	0	3
EDP 162	Financial Spreadsheet Operations II	3	0	0	3
EDP 250	Database Management Systems II	3	0	0	3
		9	0	0	9
FOURTH QUARTER					
EDP 154	Microcomputer Communications	3	0	0	3
EDP 172	Financial Spreadsheet Operations III	3	0	0	3
EDP 262	Database Management Systems III	3	0	0	3
		9	0	0	9

CERTIFICATE IN MICROCOMPUTING T-018D

(Desktop Presentation)

DESCRIPTION:

The Certificate in Microcomputing (Desktop Presentation) is designed for individuals desiring skills in the design, creation, and production of presentation graphics and publications using the microcomputer.

TOTAL CREDIT HOURS: 36

CURRICULUM BY QUARTERS:

Course Title		Hours Per Week			
		C	L	P	QH
FIRST QUARTER					
BUS 100	Basic Keyboarding	3	0	0	3
EDP 102	Microcomputer Concepts	3	0	0	3
EDP 103	Introduction to Microcomputing DOS	3	0	0	3
		9	0	0	9
SECOND QUARTER					
EDP 104	Text Processing Applications I	3	0	0	3
EDP 152	Financial Spreadsheet Operations I	3	0	0	3
EDP 160	Special Topics in Microcomputing	3	0	0	3
		9	0	0	9
THIRD QUARTER					
EDP 114	Text Processing Applications II	3	0	0	3
EDP 156	Microcomputer Graphics	3	0	0	3
EDP 173	Desktop Publishing Concepts I	3	0	0	3
		9	0	0	9
FOURTH QUARTER					
EDP 174	Intermediate Desktop Publishing	3	0	0	3
EDP 256	Microcomputer Graphics II	3	0	0	3
	Microcomputer Elective	3	0	0	3
		9	0	0	9

CERTIFICATE IN MICROCOMPUTING T-018C

(General)

DESCRIPTION:

The Certificate in Microcomputing (General) is designed for individuals desiring a conceptual knowledge of microcomputer operations in addition to developing skills using a variety of major software application programs.

TOTAL CREDIT HOURS: 36

CURRICULUM BY QUARTERS:

Course Title		Hours Per Week			
		C	L	P	QH
FIRST QUARTER					
BUS 100	Basic Keyboarding	3	0	0	3
EDP 102	Microcomputer Concepts	3	0	0	3
EDP 103	Introduction to Microcomputing DOS	3	0	0	3
		9	0	0	9
SECOND QUARTER					
EDP 104	Text Processing Applications I	3	0	0	3
	OR	OR			
EDP 125	Business Word Processing	3	0	0	3
EDP 151	Intermediate DOS Operations	3	0	0	3
EDP 152	Financial Spreadsheet Operations I	3	0	0	3
		9	0	0	9
THIRD QUARTER					
EDP 150	Database Management Systems I	3	0	0	3
EDP 162	Financial Spreadsheet Operations II	3	0	0	3
	Microcomputer Elective	3	0	0	3
		9	0	0	9
FOURTH QUARTER					
EDP 250	Database Management Systems II	3	0	0	3
	Microcomputer Elective	3	0	0	3
	Microcomputer Elective	3	0	0	3
		9	0	0	9

CERTIFICATE IN MICROCOMPUTING T-018S
(Microcomputer Support)

DESCRIPTION:

The Certificate in Microcomputing (Microcomputer Support) is designed for individuals desiring knowledge and skills in configuring and operating micro-computer systems, hardware devices, and software programs.

TOTAL CREDIT HOURS: 36

CURRICULUM BY QUARTERS:

Course Title	Hours Per Week			
	C	L	P	QH
FIRST QUARTER				
BUS 100 Basic Keyboarding	3	0	0	3
EDP 102 Microcomputer Concepts	3	0	0	3
EDP 103 Introduction to Microcomputing DOS	3	0	0	3
	9	0	0	9
SECOND QUARTER				
EDP 150 Database Management Systems I	3	0	0	3
EDP 151 Intermediate DOS Operations	3	0	0	3
EDP 154 Microcomputer Communications	3	0	0	3
	9	0	0	9
THIRD QUARTER				
EDP 152 Financial Spreadsheet Operations I	3	0	0	3
EDP 158 System Architecture	3	0	0	3
EDP 160 Special Topics in Microcomputing	3	0	0	3
	9	0	0	9
FOURTH QUARTER				
EDP 104 Text Processing Applications I	3	0	0	3
OR	OR			
EDP 125 Business Word Processing	3	0	0	3
EDP 275 Hardware/Software Support	3	0	0	3
Microcomputer Elective	3	0	0	3
	9	0	0	9

CERTIFICATE IN REAL ESTATE APPRAISAL T-224

DESCRIPTION:

The purpose of the Real Estate Appraisal curriculum is to provide the prelicensing and the precertification appraisal education requirements approved by the N. C. Real Estate Commission.

The courses required by the N. C. Real Estate Commission for prelicensing as a state-licensed appraiser are covered in this curriculum. These courses are Introduction to Real Estate Appraisal, Valuation Principles and Procedures, and Applied Residential Property Valuation.

The courses required by the N. C. Real Estate Commission for precertification as a state-certified appraiser are also provided. These courses are Introduction to Income Property Appraisal, Advanced Income Capitalization Procedures, and Applied Income Property Valuation. A good math background is very important in this curriculum. It is recommended that a student have mastered competencies found in a basic algebra course before taking Advanced Income Capitalization Procedures.

The courses required for the state-licensed appraiser and the state-certified appraiser must be completed in sequential order.

In addition to meeting the education requirements to become a state-licensed appraiser and/or a state-certified appraiser, an individual must pass the appraisal examinations given by the N.C. Real Estate Commission and meet the appraisal experience requirements. A state-licensed or state-certified appraiser will be able to identify himself or herself to the public as being state-licensed and/or state-certified, and will be qualified to perform appraisals in federally related transactions.

TOTAL CREDIT HOURS: 18

CURRICULUM:

Course Title		Hours Per Week			
		C	L	P	QH
REA 100	Introduction to Real Estate Appraisal	3	0	0	3
REA 101	Valuation Principles and Procedures	3	0	0	3
REA 102	Applied Residential Property Valuation	3	0	0	3
REA 200	Introduction to Income Property Appraisal	3	0	0	3
REA 201	Advanced Income Capitalization Procedures*	3	0	0	3
REA 202	Applied Income Property Valuation	3	0	0	3
		18	0	0	18

*For students who are weak in math, Algebra I may be recommended before taking this course.

COURSE DESCRIPTIONS

ACA 100 The Microcomputer as a Study Tool 1 0 0 1

This course is designed to enable a student to become familiar with the microcomputer and its commercially prepared software. Prerequisite: None.

ACA 110 Study Skills 3 0 0 3

The objective of this course is to help the student determine achievement levels and learning style, plan learning strategy, and develop learning skills necessary for effective academic success. Opportunity for self-assessment will be provided through standardized tests and individual profile interpretation. A variety of study techniques will be presented with special emphasis on using textbooks properly, taking and organizing notes, flash cards, effective examination skills, and library techniques. Prerequisite: None.

ACA 1001 Practical Communication Skills I 3 0 0 3

This is the first of two courses designed to provide instruction that will improve the student's basic capabilities in verbal expression, judgment, appearance, self-concept, and interpersonal relationships. Each student will be given opportunities for self-assessment and goal setting. Scheduling and organizing the course content is highly flexible to enable the instructor to respond to the specific needs of the students. Prerequisite: None.

ACA 1002 Practical Communication Skills II 3 0 0 3

This course is a continuation of the topics and process begun in ACA 1001. Individual goals will be established and each student will receive instruction appropriate for progress toward these goals. Scheduling and organizing of the course content is highly flexible to enable the instructor to respond to the specific needs of the students. Prerequisite: ACA 1001.

AHR 1102 Fundamentals of Refrigeration 6 0 9 9

The course includes identification, selection, and use of hand, measuring and special refrigeration tools; use of power drills, grinders, and pipe threaders; and use of copper tubing, fittings, and tubing fabrication. Also included in the course are physics related to refrigeration; the basic refrigeration cycle; classification, characteristics, and properties of refrigerants; and types, purpose, and principles of operation of compressors, condensers, receivers, and evaporators. The assembly and operation of a basic refrigeration system, leak checking, evacuating, and charging, compressor operational checks, and system trouble analysis are covered. Prerequisite: None.

AHR 1102A Fundamentals of Refrigeration (Part I) 3 0 3 4

This course is the first of a two-part course and it includes identification, selection, and the use of hand, measuring and special refrigeration tools; use of power drills, grinders, and pipe threaders; and use of copper tubing, fittings, and tubing fabrication.

Also included in the course are physics related to refrigeration; the basic refrigeration cycle; classification, characteristics, and properties of refrigerants; and types, purpose, and principles of operation of compressors, condensers, receivers, and evaporators. The assembly and operation of a basic refrigeration system, leak checking, evacuating, and charging, compressor operational checks, and system trouble analysis are covered. Prerequisite: None.

AHR 1102B Fundamentals of Refrigeration (Part II) 3 0 6 5

This course is the continuation of AHR 1102A. Prerequisite: AHR 1102A.

AHR 1103 Domestic and Commercial Refrigeration 6 0 12 10

The course covers types and operating principles of domestic hermetic units, domestic absorption units, operation and trouble analysis of hermetic electrical components and circuits, repair and maintenance of hermetic units, calculation of heat loads, and equipment selection and system balance. The course covers operating principles, installation, and maintenance of the following: floats, automatic and thermostatic expansion valves, thermostatic and pressure motor controls, heat exchangers, oil separators, driers, suction filters, and minor accessories. Also included are the installation, operation, service, and trouble analysis of the following equipment: walk-in coolers, display cases, frozen food cabinets, reach-in cabinets, water coolers, ice makers, multiple compressors, and evaporator system operations. Prerequisite: AHR 1102.

**AHR 1103A Domestic and Commercial
Refrigeration (Part I)**

3 0 6 5

This course is the first of a two-part course and it covers types and operating principles of domestic hermetic units, domestic absorption units, operation and trouble analysis of hermetic electrical components and circuits repair and maintenance of hermetic units, calculation of heat loads, and equipment selection and system balance. The course covers operating principles, installation, and maintenance of the following: floats, automatic and thermostatic expansion valves, thermostatic and pressure motor controls, heat exchangers, oil separators, driers, suction filters, and minor accessories. Also included are the installation, operation, service, and trouble analysis of the following equipment: walk-in coolers, display cases, frozen food cabinets, reach-in cabinets, water coolers, ice makers, multiple compressors, and evaporator system operations. Prerequisite: AHR 1102A & AHR 1102B.

**AHR 1103B Domestic and Commercial
Refrigeration (Part II)**

3 0 6 5

This course is the continuation of AHR 1103A. Prerequisite: AHR 1103A.

AHR 1104 Air Conditioning Controls I 5 0 3 6

The course includes theory of electrical and electronic controls; principles of operation, application, connection, and adjustment; use of pressure regulators and electrical thermostats, dual thermostats, heating-cooling thermostats and humidistats,

valves, dampers, pilot positioners, and two-position controls. The principles of operation, application, wiring, and adjusting of controls are covered. Prerequisite: None.

AHR 1105 Principles of Air Conditioning **6 0 9 9**

The course provides an introduction to air conditioning, psychrometrics, principles of load estimating, applied load estimating, residential and commercial equipment, and balancing the system. Prerequisite: None.

AHR 1106 Air Conditioning Controls II **3 0 0 3**

The course covers theory of pneumatic controls, principles of operation, application, connection and adjustment, pressure regulators and pneumatic thermostats, dual thermostats, heating-cooling thermostats, humidistats, valves, dampers and pilot positioners, non-bleed controllers, and two-position controls. The principles of operation, application, wiring, and adjusting of controls are covered. Prerequisite: AHR 1104.

AIB 202 Principles of Banking **4 0 0 4**

This course presents the fundamentals of bank functions in a descriptive fashion so that the beginning banker may acquire a broad and operational perspective. It reflects the radical changes in banking policy and practice which have occurred in recent years. Topics covered are banks and the monetary system, negotiable instruments, the relationship of the commercial bank to its depositors, types of bank accounts, the deposit function, the payments function, bank loans and investments, other banking services (trust, international, and safe deposit), bank accounting and marketing, external and internal controls, and the public service obligation of banks. Prerequisite: None.

AIB 203 Bank Investments **4 0 0 4**

AIB's bank investments course covers the sources and use of bank funds and the place of investment in the overall scheme of bank operations. Especially important are the relationship of investments to business and the unique functions, advantages, and purpose served by a wide range of securities. Investment terminology is covered in detail. Prerequisite: None.

AIB 205 Bank Management **4 0 0 4**

This course presents new trends which have emerged in the philosophy and practice of management. The study and application of the principles outlined provide new and experienced bankers with a working knowledge of bank management. It should be noted that the course is not one of personnel management but rather of business management. It touches on objectives, planning, structure, control, and the interrelationship of various bank departments. Since case study is becoming well established as an effective management learning technique, the course also uses illustrative cases. Prerequisite: None.

AIB 209 Installment Credit**4 0 0 4**

This modular course emphasizes the pragmatic “how-to” details of installment credit. Topics covered are principles of credit evaluation, open-end credit, marketing bank services, collection policies and procedures, legal aspects, financial statement analysis, direct and indirect installment lending, leasing and other special situations, installment credit department management, insurance and rate structure, and yields. Prerequisite: None.

AIB 210 Money and Banking**4 0 0 4**

This course presents the basic economic principles most closely related to the subject of money and banking in a context of topics of interest to present and prospective bank management. The course stresses the practical application of the economics of money and banking to the individual bank. Some of the subjects covered include structure of the commercial banking system; the nature and functions of money; banks and the money supply; cash assets and liquidity management; bank investments, loans, earnings, and capital; the Federal Reserve System and its policies and operations; Treasury Department operations; and the changing international monetary system. Prerequisite: None.

AIB 231 Savings and Time Deposit**4 0 0 4**

This course reflects recognition of the fact that a knowledge of the historical development of savings institutions and an awareness of the basic economic function of the savings process are necessary to an understanding of the current operations and policies of these institutions. It begins with a review of the economics of the savings process in order to clarify important differences between financial savings by individuals or organizations and real savings that appear as capital information. Different types of financial savings are reviewed in order to describe the system of financial flow from income to capital investment. Also covered are interest rates, types of savings accounts, and the management of savings institutions (asset management, operations control, supervision, liquidity, and marketing). Prerequisite: None.

AIB 233 Analysis of Financial Statements**4 0 0 4**

This course is divided into two main sections: characteristics of financial statements and financial statement analysis. The first section serves as a useful review of basic accounting principles for those students who have studied accounting. For those who have not, this section provides the minimum accounting background necessary for profitable study of financial statement analysis. (It should be emphasized, however, that Analysis of Financial Statements is an advanced course and difficult for students with little background in accounting.) The second section of the course covers goals, methods, and tools of analysis; analysis of profit and loss, accounts receivable, inventories, and balance sheets; the relationship of balance sheet accounts to sales and to projected statements and cash budgets. Prerequisite: BUS 120.

AIB 235 Loan and Discount**3 0 0 3**

This course presents the essential facts about promissory notes, including calculating

interest and discounting commercial paper; guaranties; general collateral agreements; examining and processing documents accompanying notes secured by stocks, bonds, and savings account passbooks; and the concepts of attachment, perfection, priority, default, and foreclosure. The course uses programmed instruction and several simulation exercises. Prerequisite: None.

AIB 236 Trust Functions and Services 4 0 0 4

This course provides an overview of many of the generally accepted principles of the law of estates, trusts, and agencies as it takes the student on a step-by-step study of trust functions and services encountered in the daily operation of a trust department. Prerequisite: AIB 202.

AIB 237 International Banking 4 0 0 4

This course presents the basic framework and fundamentals of international banking: how money is transferred from one country to another, how trade is financed, what the international agencies are and how they supplement the work of commercial banks, international lending, and how money is changed from one currency to another. Prerequisite: None.

AIB 238 Law and Banking 4 0 0 4

This course is designed not only to present an introduction to basic commercial law, but to relate it more specifically to banking and bank transactions. Topics include contracts, agency and partnerships, corporations, real property, personal property and sales, the Uniform Commercial Code, negotiable instruments and bank collections, and secured financing. Prerequisite: None.

AIB 239 Marketing for Bankers 4 0 0 4

This course presents marketing as a broad concept, far more complex than public relations, advertising, and personal selling, which are important components of marketing but are not individually or collectively the equivalent of marketing. It is designed for bankers who are unacquainted with marketing and deals with concepts and philosophies of marketing, marketing information, research, and target; the marketing mix (product strategy, distribution strategy, advertising and sales promotion, personal selling, and pricing strategy); and the methods of marketing planning. Prerequisite: None.

ARC 105 Architectural Materials and Methods 3 0 0 3

This course emphasizes materials used in the construction of architectural structures. Field trips to construction sites and study of manufacturer's specifications for materials, properties, standard sizes of structural materials, and construction techniques are included. Prerequisite: None.

ARC 106 Architectural Drafting I 2 0 6 4

This course is designed to provide fundamental knowledge of the principles of drafting. Basic skills and techniques of drafting include use of drafting equipment,

lettering, freehand orthographic and pictorial sketching, geometric construction, and orthographic instrument drawings of principal views. Projection problems dealing with principles of descriptive geometry involving points, lines, planes, connectors, and the principles of planning drafting are introduced. Prerequisite: None.

ARC 107 Architectural Drafting II

2 0 6 4

This course develops techniques in architectural lettering, symbols and their interpretation, dimensioning and freehand, and instrument drafting. Drawings of construction details, using appropriate material symbols, connections, sections, scale details, and full-size details are prepared from preliminary sketches. Applications of descriptive geometry used in visualization and analytical solutions of the drafting problems involving auxiliary views, intersections, and developments are also included. Prerequisite: ARC 106 or by permission of department chairperson.

ARC 108 Architectural Drafting III

0 0 9 3

This course includes the development of design and programming skills applied to realistic situations and the introduction to rendering and projections. Prerequisite: DFT 107 or by permission of department chairperson.

ARC 109 Architectural Mechanical Equipment

3 0 3 4

The course provides general study of heating, air conditioning, plumbing and electrical equipment, materials and symbols, building code requirements pertaining to residential and commercial structures, reading and interpretation of working drawings by mechanical engineers, and coordination of mechanical and electrical features with structural and architectural designs. Prerequisite: None.

ARC 150 Site Planning

2 0 6 4

This course provides an introduction to factors influencing placement of buildings on sites and specific analysis of sites in terms of solar, topographic, use, and wind characteristics. Field work in surveying is also included. Prerequisite: None.

ARC 181 History of Architecture and Construction

5 0 0 5

This course covers the evolution of building development from primitive to modern and the history of architectural construction and design. The principal periods studied include Prehistory, Ancient Egypt and Mesopotamia, Greece, Rome, Romanesque, Gothic, Renaissance, and Early American. Prerequisite: None.

ARC 220 Architectural Drafting IV

2 0 9 5

This course covers the drawing of structural plans and details as prepared for building construction, including steel, concrete, and timber structural components. Appropriate details and drawings necessary for construction and fabrication of structural members and reference materials used to provide the draftsman with skills and knowledge in locating data and in using handbooks are also included. Prerequisite: DFT 108 or by permission of department chairperson.

ARC 221 Architectural Drafting V **2 0 9 5**

This course provides an in-depth approach to the study of architectural drafting, continuing the study of details of construction, and introducing the elements of mechanical and electrical equipment systems and their relationship to a finished building. Prerequisite: ARC 220.

ARC 222 Architectural Drafting VI **2 0 9 5**

The preparation of the complete set of working drawings for the architectural structure, the preparation of millwork drawings, cabinets and built-in equipment detail drawings, and door, window, and room schedules are required. Site and landscaping plans are studied and drawn. A final assembly of the complete document for construction purposes is required. Prerequisite: ARC 221.

ARC 235 Codes, Specifications, and Contract Documents **3 0 3 4**

Building codes and their effect in relation to specifications and drawings, the purpose and writing of specifications are studied, along with their legal and practical application to working drawings. Contract documents are analyzed and studied for the purpose of client-architect-contractor responsibilities, duties, and mutual protection. Prerequisite: None.

ARC 236 Construction Estimating and Field Inspecting **3 0 3 4**

This course provides an interpretation of working drawings for a project, preparation of material and labor quantity surveys from plans and specifications, and approximate and detailed estimates of cost. A study of materials takeoff, labor takeoff, subcontractor's estimates, overhead costs, and bid and contract procedures, and a detailed inspection of the construction by comparing finished work to the specifications are also included. Prerequisite: None.

AUT 1111 Automotive Body Repair I **3 0 12 7**

The course includes the basic principles of automobile construction, design, and manufacturing; a thorough study of angles, crowns, and forming of steel into the complex contour of the present-day vehicles; and the application of basic principles of straightening, aligning, and the spraying of primer surfacer. Prerequisite: None.

AUT 1112 Automotive Body Repair II **3 0 15 8**

The course provides a thorough study of the requirements of a metal worker including the use of essential tools, forming fender flanges and beads, and straightening typical auto body damage. The student begins acquiring skills such as shaping angles, crowns, and contour of the metal of the body and fenders. Metal working and the spraying of primer surfacer are also covered. Prerequisites: AUT 1111 and WLD 1130.

AUT 1113 Metal Finishing and Painting **2 0 12 6**

This course is intended to teach the student the principles and techniques of

refinishing auto bodies. Topics covered are paint removal, masking, preparing surfaces, paint selection, spray equipment, and practice spraying. Prerequisites: AUT 1112 and WLD 1131.

AUT 1114 Frame Straightening and Alignment 4 0 9 7

This course is an introduction to the repair of automobile frames and suspension systems. Instruction will include assessing frame damage, framing, frame straightening equipment, safety, frame straightening, frame repair, and unibody. Prerequisites: AUT 1112 and WLD 1131.

AUT 1116 Automotive and Truck Painting 3 0 21 10

This course is intended to give the student practice in surface preparation and paint application. The following topics will be covered: review of finishes, surface preparation, undercoats, topcoats, and common painting problems. Prerequisites: AUT 1113, AUT 1114 and WLD 1131.

AUT 1130 Basic Electricity 2 0 3 3

This course is an introduction to DC electricity. Emphasis will be placed on testing basic DC circuits with a DVOM, a 12v test light and a jumper wire. Testing of the battery, cranking system, charging system and related electrical components will be taught. Prerequisite: None.

AUT 1131 Introduction to Automobile and Shop Equipment 2 2 0 3

This course is a general introduction to the automobile, the shop area, shop equipment, and safety. Careers in automotive, basic hand tools, precision measuring tools, test equipment, fasteners, gaskets and reference manuals will also be covered. The student will also learn how to conduct a safety inspection and what the operating procedures of a safety inspection station should be. It will include how to properly fill in reports and how to become licensed. Prerequisite: None.

AUT 1132 Automobile Fuel Systems and Carburetors 1 0 3 2

This is a course on how the internal combustion engine uses gasoline as a fuel. The total fuel system with special emphasis on the six basic circuits of the carburetor will be discussed. Prerequisite: None.

AUT 1133 Automobile Brake Systems 2 0 6 4

This course includes a complete study of drum and disc brakes: their components, operation, and repair. A study of the hydraulic system including overhaul or repair to master cylinders, wheel cylinders, disc brake calipers, and all connecting hydraulic components will be covered. Also included will be information on asbestos, its hazards, how to safely handle it and how to properly collect and dispose of its wastes. The operation and repair of new anti-lock brake systems will be discussed. Prerequisite: None.

AUT 1135 Automobile Cranking, Charging, and Motor Operated Systems	2	0	6	4
Instruction in the course deals with the operation and repair of the cranking system, charging system (including regulators), and all other motor operated systems on an automobile. Prerequisite: None.				
AUT 1136 Automotive Electronics	1	0	3	2
This course deals with automotive electricity and electronics. Discussed in detail will be semi-conductors and how they are made, principles of operation, and how they can be applied in the control circuits on the automobile. Diagnosis and repair of these circuits will also be covered. Prerequisite: AUT 1130 or by permission of department chairperson.				
AUT 1137 Automobile Electronic Fuel Injection	1	0	3	2
This course is designed to give the student the basic knowledge needed to service a fuel injection system. The course includes the theory of operation of the modern EFI systems, diagnosis of EFI problems and servicing. Prerequisite: None.				
AUT 1138 Automobile Chassis and Suspension	2	0	6	4
This course covers the principles, functions, diagnosis and repair of all types of automobile suspension and steering systems. Prerequisite: None.				
AUT 1139 Engine Performance with Diagnostics	2	0	6	4
The material contained in this course covers breaker point, electronic, and distributorless ignition systems. Electronic engine controls, electronic engine control testing, and oscilloscope testing are included. The testing of the engine for mechanical soundness and for proper fuel mixture will also be covered. Prerequisite: None.				
AUT 1140 Automobile Wheel Alignment	1	0	3	2
This course covers the theory of all of the principles of suspension geometry including all adjustable and nonadjustable alignment angles. Also covered are the types of vehicle alignments and the operation of various types of alignment equipment. Prerequisite: None.				
AUT 1141 Standard Transmissions, Transaxles, and Drive Trains	2	0	6	4
This course will discuss the theory of operation and repair of standard, 4-speed, 4-speed overdrive transmission and transaxles in rear wheel and front wheel drive automobiles. Theory of operation of the clutch and related components will be discussed. All types of drive line components and axles, their operation and repair will be covered. Prerequisite: None.				
AUT 1142 Automotive Air Conditioning	2	0	3	3
This course is a general introduction to the principles of air conditioning and the				

refrigeration system. Each component in the refrigeration system, its purpose, diagnosis, and repair will be studied. The servicing (evacuation and charging) of all types of automobile refrigeration systems will be covered with special emphasis on the new refrigerant recovery systems. Prerequisite: None.

AUT 1143 Basic Engine Operation and Repair 2 0 6 4

This course will cover the basic operation and repair of the internal combustion reciprocating engine. The course will include machine work as well as assembly and partial repair such as valve jobs and timing components. Prerequisite: None.

AUT 1144 Automotive Emission Controls 2 0 3 3

This course deals with the automotive emission control system and the effect of automotive emissions on the environment. The theory of operation of all emission control systems, their effect on the pollutants emitted from the automobile, and the diagnosis and repair of these systems will be studied. Prerequisite: None.

AUT 1145 Automatic Transmission Servicing 1 0 3 2

This course will include the theory of basic automatic transmission and torque converter operation. The proper way to service these units including fluid change, band adjustment, linkage adjustment, and replacement of external components will be covered. Prerequisite: None.

BIO 010 Human Anatomy 3 0 0 0

This course is designed to acquaint students with basic knowledge of human anatomy by tracing system pathways. The student may also gain proficiency in medical and biological terminology. Prerequisite: None.

BIO 101 General Biology I 3 2 0 4

This is a functional course in biology with emphasis on scientific reasoning, cellular structure and function, human anatomy and physiology, and the diversity of living organisms. Prerequisite: None.

BIO 102 General Biology II 3 2 0 4

This is a continuation of BIO 101 with emphasis on reproduction and development, inheritance, ecological principles, and evolution by natural selection. Prerequisite: BIO 101.

BIO 107 Anatomy and Physiology I 3 2 0 4

This is an introduction to normal structure and function of the human body. When relevant, clinical applications are made to relate normal structure and function to basic pathological conditions. Students are given the opportunity to employ their assimilated knowledge in class discussion and laboratory work. Laboratory participation introduces additional information which the student gains by participating in various lab exercises and learning experiences. Prerequisite: High school chemistry or CHM 010.

BIO 108 Anatomy and Physiology II**3 2 0 4**

This is a continuation of BIO 107, Anatomy and Physiology I, with emphasis on the vascular system, respiratory system, digestive system, urinary system, fluid and electrolyte balance, endocrine system, and reproductive system. Prerequisite: BIO 107.

BIO 111 Microbiology**3 2 0 4**

This is a one-quarter course designed to provide an understanding of microbiological principles and applications. Emphasis is placed on microbial classifications, structure and function, host-parasite relationships, and relations to man. Laboratory sessions are concerned with principles of identification, slide techniques, culture methods, and sterile procedures. Prerequisite: BIO 108.

BIO 112 Pathology**3 0 0 3**

Pathology is a one-quarter course designed to introduce the students to the study of the disease processes in the human body. Emphasis will be placed upon the cause, pathogenesis, occurrence, and prognosis of common human diseases. Prerequisites: BIO 111 and enrolled in fourth quarter of curriculum or by permission of BIO 112 instructor.

BIO 115 Medical Terminology I**1 0 0 1**

This is the first of a series of two courses in which the student is introduced to terms related to all areas of medical science, hospital service, and paramedical specialties. Terms introduced parallel the topics covered in BIO 107, Anatomy and Physiology I. Prerequisite: None.

BIO 116 Medical Terminology II**1 0 0 1**

This is the second of a series of two courses in which the student is introduced to terms related to all areas of medical science, hospital service, and paramedical specialties. Terms introduced parallel the topics covered in BIO 108, Anatomy and Physiology II. Prerequisite: BIO 115.

BIO 120 Principles of Biology I**3 2 0 4**

A study of the basic principles and concepts of living organisms with emphasis on the chemistry of life, structure and function of the cell, metabolism, cellular respiration, photosynthesis, protein synthesis, and genetics. Prerequisite: High school chemistry recommended.

BIO 121 Principles of Biology II**3 2 0 4**

A study of the basic principles and concepts of evolution along with the study of structure and function of the animal kingdom with emphasis on transport, digestion, gas exchange, homeostasis, regulation and reproduction. Prerequisite: BIO 120.

BIO 122 Principles of Biology III**3 2 0 4**

A study of the basic principles and concepts of ecology, plant and animal diversity, along with structure and function of the plant kingdom. Prerequisite: BIO 121.

BIO 169 Fundamentals of Disease Processes 4 0 0 4

The student is introduced to the major processes involved in producing pathological entities and disorders in man and how such states interfere with normal physiology. After this knowledge of diseases and abnormal states is acquired, it is correlated with the more commonly seen pathology in clinical practices. Emphasis will then be placed upon the fundamental principles of microbiology, the relationship of microorganisms to disease, modes of transmission, control, and the etiological agents of infectious diseases. Prerequisites: BIO 107 and BIO 108.

BIO 201 General Zoology 3 2 0 4

This course is designed to further the concepts of zoology as covered in BIO 120, 121, and 122. Emphasis is placed on animal classification, habitat, and ecological relationships. Prerequisite: BIO 122.

BIO 205 General Botany 3 2 0 4

This course is a study of the plant kingdom with emphasis placed on plant classification, morphology, life histories, and ecological principles. Prerequisite: BIO 122.

BUS 010 Pretechnical Accounting 5 0 0 0

This course is designed to present an overview of the complete bookkeeping cycle including journalizing, posting, summarizing, preparing financial statements, and the closing of books. Prerequisite: None.

BUS 030 Introduction to Shorthand 5 0 0 0

This course provides for the introduction to basic shorthand theory, dictation of practiced materials and transcription skills, and development of a fluent reading rate. This is an introduction to BUS 106 Shorthand I. Prerequisite: None.

BUS 100 Basic Keyboarding 3 0 0 3

Basic Keyboarding is an introduction to the touch typewriting system on the microcomputer with emphasis on correct techniques, alphabetic data entry, numeric data entry using the ten-key numeric pad, and proofreading procedures. Prerequisite: None.

BUS 101 Introduction to Business 5 0 0 5

A survey of the business world is presented in this course with particular attention devoted to the structure of the various types of business organization, methods of financing, internal organization, and management. Prerequisite: None.

BUS 102 Keyboarding 3 2 0 4

Keyboarding is an introduction to the touch typewriting system with emphasis on correct techniques, mastery of the keyboard, simple business correspondence, tabulation, and manuscripts. Prerequisite: None.

BUS 103 Document Formatting 3 2 0 4

The development of speed and accuracy with further mastery of correct typewriting techniques is the objective of Document Formatting. These skills and techniques are acquired by completing typing projects that include tabulation, manuscripts, correspondence, and business forms. Prerequisite: BUS 102 or the equivalent.

BUS 104 Document Production/Word Processing 3 2 0 4

This course emphasizes production typing problems and speed building. Attention is given to the development of the student's ability to function as an expert typist, producing mailable copies. Documents may be produced at the typewriter or word processor. The production units are tabulation, manuscripts, correspondence, and business forms. Prerequisites: BUS 103 and BUS 240.

BUS 105 Advanced Word Processing Applications 3 2 0 4

Advanced Word Processing Applications is a continuation of production typing problems and speed building through an office simulation practice set. Mailable copies are required. Prerequisite: BUS 104 or the equivalent.

BUS 106 Shorthand I 3 2 0 4

This is a beginning course in the theory and practice of reading and writing shorthand. It emphasizes phonetics, penmanship, word families, brief forms, and phrases. Prerequisite: None.

BUS 107 Shorthand II 3 2 0 4

This course is a continued study of theory with emphasis on speed in dictation and accuracy in transcription. A minimum dictation rate of 60 words per minute is required. Transcription may be done at the typewriter or the word processor. Prerequisites: BUS 106 or the equivalent and BUS 240.

BUS 108 Shorthand III 3 2 0 4

This course is a continuation of theory and speed building as well as an introduction to office-style dictation. The development of speed in dictation to a minimum dictation rate of 80 words per minute and mailability are the objectives of this course. Prerequisite: BUS 107 or the equivalent.

BUS 109 Business Mathematics 5 0 0 5

Business mathematics emphasizes fundamental mathematical operations and their application to business problems. Topics covered include sales records, inventories, commissions, markups, depreciation, and interest. Prerequisite: None.

BUS 112 Machine Transcription I 3 2 0 4

This course is the first of three courses designed to introduce and develop skills in machine transcription. Skills are developed in operating a transcribing unit and in word processing. Prerequisites: BUS 103, BUS 240, and ENG 102.

BUS 113 Vocabulary/Terminology I**3 0 0 3**

This course is designed to develop an understanding of the terminology and vocabulary used in business, technical, and professional offices. Prerequisite: None.

BUS 114 Vocabulary/Terminology II**3 0 0 3**

As a continuation of BUS 113, Vocabulary Terminology I, this course emphasizes terminology and vocabulary in the business environment with special emphasis on medical and legal professions as well as word processing. Prerequisite: BUS 113.

BUS 115 Business Law I**3 0 0 3**

This course is designed to provide the student an opportunity to learn basic fundamentals of business law including the judicial system, contract law, sales and consumer protection laws. Prerequisite: None.

BUS 116 Business Law II**3 0 0 3**

This course is designed to provide the student an opportunity to learn basic fundamentals of business law including property, commercial paper, insurance, secured transactions, bankruptcy, agencies, employment, emerging trends and issues. Prerequisite: BUS 115.

BUS 118 Secretarial Accounting I**4 0 3 5**

This course is the first of two courses designed specifically for Administrative Office Technology majors to study the principles, practices, and tools of the accounting process as encountered in the secretarial profession. Prerequisite: BUS 109.

BUS 119 Secretarial Accounting II**4 0 3 5**

This course is the second of two courses designed to further develop skills in accounting as needed by Administrative Office Technology majors. The principles defined in BUS 118, Secretarial Accounting I are broadened and put to use through workbook problems and a practice set. Prerequisite: BUS 118.

BUS 120 Accounting I**4 0 3 5**

This course is a study of the principles, techniques, and tools of the accounting process. The areas of instruction include the collecting, summarizing, analyzing, and reporting of financial information with emphasis on the application of the principles learned. Prerequisite: None.

BUS 121 Accounting II**4 0 3 5**

This course concentrates on the application of the procedures involved in the recording of receivables, payables, inventories, deferrals, accruals, plant assets, and payrolls. Prerequisite: BUS 120.

BUS 122 Accounting III**4 0 3 5**

This course expands the principles and concepts set forth in BUS 120, Accounting

I and BUS 121, Accounting II. Manufacturing and job order cost systems, budgetary control, and standard cost systems are major areas of instruction. Additional attention is given to the decision-making process as determined from cost and revenue relationships, management reports, changes in financial position, consolidated statements, and financial statements. Prerequisite: BUS 121.

BUS 123 Business Finance **5 0 0 5**

This course is a study of the principles and problems of financing business firms. Topics included in instruction are source and use of funds, cost of capital, dividends, leasing, financial statement analysis, and mergers. Prerequisite: BUS 122.

BUS 128 Personal Financial Management **5 0 0 5**

This course covers the basic concepts of personal finance. The student will become familiar with establishing financial objectives, investment risks, financial institutions, investment alternatives, making investment decisions, and estate planning. Prerequisite: None.

BUS 130 Career Planning and Job Hunting **2 0 0 2**

This course is an in-depth study in developing realistic career objectives and goals. Students will learn techniques to sell themselves in the job market and how to set the stage for long-term, fulfilling career development. Prerequisite: None.

BUS 131 Human Skills in Organizations **3 0 0 3**

This course is a study in how to plan a career, get a job, and become an effective employee through knowledge of and skill in human relations. The student will study these skills through case studies, projects, role playing, lectures, and guest speakers who have expertise in human relations techniques. Prerequisite: None.

BUS 141 Medical Vocabulary and Terminology **3 0 0 3**

This course provides students with a means to develop an understanding of vocabulary and terminology for clerical employment opportunities in the medical field. Prerequisite: None.

BUS 162 Fundamentals of Real Estate **5 0 0 5**

This course consists of instruction in fundamental real estate principles and practices, including real estate law, financing, brokerage, closing, valuation, management, and taxation. Instruction is included on residential building construction, property insurance, land use, and the real estate market and the North Carolina Real Estate License Law and Rules/Regulations of the North Carolina Real Estate Licensing Board. Prerequisite: None.

BUS 164 Real Estate Law **5 0 0 5**

This is a survey course of law as it relates to real estate activities including the legal aspects pertaining to the sale, purchase, and management of real property. Special

emphasis is placed on the legal steps needed to handle real estate transactions from the preparation of the listing contract to the closing statement. Prerequisite: None.

BUS 165 Real Estate Brokerage Operations 3 0 0 3

This course consists of basic instruction in the various aspects of real estate brokerage operations, including establishing a brokerage firm, management concepts and practices, personnel and training, marketing operations, records/bookkeeping systems (including trust account bookkeeping), and financial operations. Prerequisite: BUS 162.

BUS 190 Horticultural Business Management 3 0 0 3

This course is designed to instruct students on how to set up a small business in the area of horticulture. The student will learn various concepts of business management, planning, decision making, and leadership. Prerequisite: None.

BUS 200 Starting Your Own Business 3 0 0 3

This course is designed to teach the student how to develop a comprehensive business plan. The student will learn how to define the business, make the basic decisions needed to begin a business and develop a business plan for the first six months of operation. Prerequisite: None.

BUS 206 Dictation/Transcription 2 0 3 3

This course is a continuation of theory with emphasis on speed building in dictation, mailability in transcription, and office-style dictation. A minimum dictation rate of 100 words per minute is required. Prerequisite: BUS 108.

BUS 209 Real Estate Finance 5 0 0 5

This course is a study of real estate finance, including an analysis of financial institutions, techniques, and instruments necessary in real estate. Topics of instruction include the source of funds, types of mortgages, roles of government agencies, interest rates, loan costs, closings, and competition in the money market. Prerequisite: None.

BUS 210 Business Statistics 5 0 0 5

This course is designed to introduce students to basic concepts and methods of statistics. Students are taught to summarize data and then employ a decision-making process based on statistical inference. Prerequisite: None.

BUS 211 Reprographics 2 0 3 3

This course is designed to give introductory instructions in filing, machine transcription, word processing, graphics, ten-key touch, and using a reference manual to produce mailable documents. Prerequisite: BUS 103 and BUS 240.

BUS 212 Machine Transcription II 3 2 0 4

This course is the second of three courses designed to introduce and develop skills

in machine transcription. Skills in punctuation, spelling, and typing styles are developed through direct transcription from oral dictation to mailable printed form. Transcription may be done on the typewriter or word processor. Prerequisite: BUS 112 and BUS 240.

BUS 213 Filing 2 0 0 2

This course covers the fundamentals of indexing and filing, combining theory and practice by use of miniature letter, filing boxes, and guides. The course includes alphabetic, numeric, and geographic filing as well as records control. It can also be taken in the Individualized Learning Center. Prerequisite: None.

BUS 214 Administrative Office Procedures 5 0 0 5

This course is designed to acquaint the student with the responsibilities encountered by an administrative assistant during the workday. The areas of instruction are receptionist's duties, handling the mail, telephone techniques, travel information, telecommunications, office records, purchasing of supplies, and office organization. Prerequisites: BUS 104 and ENG 102.

BUS 215 Machine Transcription III 3 2 0 4

This course is the third of three courses designed to introduce and develop skills in machine dictation and transcription. Skills are developed by the operation of dictating, transcribing, and word processing equipment. Prerequisite: BUS 212.

BUS 216 Real Estate Sales 3 0 0 3

This course is a study of the current sales techniques in the real estate industry, including problems in selling as well as emphasis on consumer motivation and reactions. Particular emphasis is placed on morals and ethics related to the sale of real property. Other topics include the methods of securing property listings and prospective customers, bringing the prospect and property together, the use of advertising in the selling function, the basic development of a sales plan, and sales presentation. Prerequisite: None.

BUS 221 Intermediate Accounting I 5 0 0 5

This course is a thorough treatment of the field of general accounting providing a foundation for specialized studies that follow. The course includes the framework of accounting, the balance sheet, income and retained earnings statements, cash, temporary investments, receivables, and inventories. Prerequisite: BUS 122.

BUS 222 Intermediate Accounting II 5 0 0 5

This course is designed to familiarize the student with the objectives of accounting and the principles that have evolved in response to the objectives. The course includes inventories, estimating and valuation, current liabilities, fixed assets, intangible assets, long-term investments, bonds, leases, and pensions. Prerequisite: BUS 221.

BUS 224 Advanced Accounting 3 2 0 4

A study of advanced principles and practices with special emphasis on the development of worksheet techniques for solution of problems. Accounting and reporting for consolidations and not-for-profit organizations are studied in detail. Prerequisite: BUS 227.

BUS 225 Managerial Cost Accounting I 3 2 0 4

This course is a study of the principles, techniques, and tools of the cost accounting processes within the job cost and process cost system. Instruction emphasizes the application of principles learned. Prerequisite: BUS 122.

BUS 226 Managerial Cost Accounting II 3 2 0 4

This course is a continuation of BUS 225, Managerial Cost Accounting I, with emphasis on standard cost principles and procedures, selling and distribution costs, direct costs, budgets, and executive use of cost figures. Prerequisite: BUS 225.

BUS 227 Intermediate Accounting III 5 0 0 5

This course is designed to familiarize the student with the objectives of accounting and the principles that have evolved in response to the objectives. The course includes leases, paid in capital, retained earnings, book value and earnings per share, accounting changes and correction of errors, statement from incomplete records, the statement of changes in financial position, and financial statement analysis. Prerequisite: BUS 222.

BUS 228 Real Estate Investment and Taxation 3 0 0 3

This course is a study of fundamental investment concepts such as location, timing, and methods of financing needed by the prospective investor for successful real estate investment. Special emphasis will be placed on investment during the development process, what to buy, and how to buy. Other topics to be discussed include how to take title for individual ownerships or partnerships, when to invest in real estate corporations and trusts, tax consequences and investment, and the influence of federal and state laws on real estate investments. Prerequisite: None.

BUS 229 Taxes 2 0 3 3

This course is a study and application of federal and state taxes as applied to individuals, partnerships, and corporations. The major emphasis is on the preparation of individual income tax returns. Prerequisite: None.

BUS 230 Advanced Taxes 2 0 3 3

This course is a study and application of federal and state taxes as applied to individuals, partnerships, corporations, "Subchapter S" corporations, and estate and gift taxes. Prerequisites: BUS 121 and BUS 229.

BUS 231 Real Estate Merchandising 3 0 0 3

This course is a survey of the field of real estate advertising with emphasis on the relationship to the market structure of our economy. Prerequisite: None.

BUS 231D Taxes for Paralegals	4	0	0	4
(Paralegal Technology) A continuation of study of federal income taxes; income tax withholding; declaration of estimated tax by individuals; preparation of income tax returns for individuals, partnerships, corporations, and fiduciaries. An introduction to property taxes, intangible taxes, sales and use taxes, and N.C. State Income taxes. Prerequisite: BUS 229.				
BUS 232 Sales Development	3	0	0	3
This course is a study of retail, wholesale, and specialty selling. The emphasis is on mastering the fundamentals of selling. The preparation and execution of a sales demonstration are required. Prerequisite: None.				
BUS 233 Personnel Management	3	0	0	3
Personnel management is the study of the principles of organization and the management of personnel. Specific areas of study include procurement, placement, training, performance checking, supervision, remuneration, labor relations, fringe benefits, and security. Prerequisite: None.				
BUS 234 Sales Management	3	0	0	3
This course is a continuation of BUS 232, Sales Development. Prerequisite: BUS 232.				
BUS 235 Business Management	5	0	0	5
This course is an introduction to the concepts of business and organizational management. Through study in such areas as planning and decision making, organizational structures and behavior, leadership, motivation, and resources control, the student will acquire the skills to analyze and practice good management procedures. Prerequisite: None.				
BUS 236 Land Development	3	2	0	4
This course is a study of land and population economics, land utilization, and the development factors related to manufacturing, labor, transportation, and commerce in or near the development location. Prerequisite: None.				
BUS 237 Wholesaling	3	0	0	3
This course is a comprehensive analysis of the wholesaling function emphasizing the principles and techniques employed by today's wholesale managers. The role of wholesaling in our distribution system and its relation to production and retailing are thoroughly analyzed. Prerequisite: None.				
BUS 238 Land Use Policy and Governmental Influences on Real Estate.	3	2	0	4
This course is a study of local and national trends in the development, use, and value of real property, as well as governmental policies and their effect on the real estate market. Skills are developed in the analysis, research, and correlation of the various trends, policies, and factors affecting real estate. Prerequisite: None.				

BUS 239 Marketing**5 0 0 5**

This course is a study of the principles and problems of marketing goods and services in a free enterprise economy. Topics of instruction include product selection and development, promotion, channels of distribution, and pricing. Prerequisite: None.

**BUS 240 Introductory Word Processing on
Microcomputers****2 0 3 3**

This is an introductory course designed to instruct the student in the use of a microcomputer to create, edit, store, and print text. In addition to using the equipment, the student will study basic word processing terminology and work flow. Prerequisite: BUS 102.

BUS 242 Visual Merchandising**3 2 0 4**

This course is an introduction to basic layout and design of internal commercial displays in retail stores and service institutions. Prerequisite: None.

BUS 243 Advertising**4 0 0 4**

Advertising is the study of the methods and techniques used by advertisers and agencies to persuade the public to buy. Topics covered are market research, selection of media, and evaluation and testing of advertisement effectiveness. Theory, writing, and designing advertising copy are included in class activities. Prerequisite: None.

BUS 244 Marketing Research**3 0 0 3**

This course is a study of research methods, procedures, and techniques. A practical research problem integrating finance, statistics, sampling, and collecting of data is required. Prerequisite: None.

BUS 245 Advertising Using Desktop Graphics**3 2 0 4**

This course is a study of methods and techniques used by advertisers. Some of the topics covered are advantages and disadvantages of using different types of print and broadcast media, planning advertising strategy based on target market and budget, and principles of layout and design for print media. Class activities emphasize designing copy for newspapers, brochures, fliers, signs, and newsletters using the microcomputer. Prerequisite: EDP 103.

BUS 246 Public Relations**3 0 0 3**

Public relations focuses on the planned effort necessary to influence public opinion through good character and responsible performance by emphasizing the necessity of mutually satisfactory two-way communications. Public relations for businesses is given special attention. Prerequisite: None.

BUS 247 Business Insurance**3 0 0 3**

This course is a presentation of the basic principles of risk insurance and their application as well as a survey of the various types of insurance. Prerequisite: None.

BUS 249 Marketing - Retailing Seminar 3 0 20 5

This course provides students an opportunity to pursue, under supervision, work experience in the field of marketing with the objective of providing realism and motivation to their field of study. Prerequisite: None.

BUS 250 Word Processing 1 4 0 3

This course is designed to instruct students in using a word processing system for creating, editing, printing, and storing documents. Through the use of a training workbook, students will learn to produce mailable business documents. Prerequisites: BUS 104 and ENG 102.

BUS 262 Fashion Merchandising 3 2 0 4

This course is designed to acquaint the student with fashion, characteristics of style, trends, coordination of color, and design analysis. Prerequisite: None.

BUS 263 Retailing I 3 0 0 3

This course is a study of the role of retailing in our distribution system. Topics of instruction include the development of present retail practices, functions performed, principles governing effective operation, and managerial problems resulting from current economic and social trends. Prerequisite: None.

BUS 264 Retailing II 3 0 0 3

A continuation of BUS 263, Retailing I. Prerequisite: BUS 263.

BUS 269 Auditing I 3 2 0 4

Auditing is a study of the theory and practices of auditing, including professional standards and rules of conduct. The student will learn the specific techniques of auditing various balance sheet accounts and comparative analysis using rapid calculation procedures. Study will also include detailed audits, internal auditing, and internal control as well as current trends in statement preparation. Prerequisite: BUS 222.

BUS 270 Auditing II 3 2 0 4

This course is a continuation of BUS 269, Auditing I. The emphasis will be on the preparation of audit programs, the application of auditing procedures, the various types of auditors' reports, and other attestation and accounting services. Students will also be required to prepare an audit practice set. Prerequisite: BUS 227 and BUS 269.

BUS 272 Principles of Supervision 3 0 0 3

This course is a study of the basic responsibilities of the supervisor and his relationship to supervisors, subordinates, and associates. The methods of supervision and problem-solving techniques are presented through the case study method. Prerequisite: None.

BUS 280 Microcomputer Accounting Applications:**General Ledger****3 0 0 3**

This course is designed for any student interested in learning to use a general ledger accounting package on the microcomputer. Topics to be covered include chart of account design, transaction entry, posting, closing, correcting, and report generation. Additionally, the relationship of the general ledger to other accounting functions will be covered. Microcomputer simulations will be used to introduce decision-making and group planning. Prerequisite: EDP 103 and BUS 121 or BUS 119.

BUS 281 Microcomputer Accounting Applications:**Accounts Receivable/Accounts Payable****3 0 0 3**

This course is designed for any student interested in learning to use accounting software packages on the microcomputer. The course will emphasize the fundamentals in setting up a microcomputer accounting system, with particular emphasis on using an accounts receivable and accounts payable. Prerequisites: EDP 103 and BUS 120.

BUS 282 Microcomputer Accounting Applications:**Payroll/Inventory****3 0 0 3**

This course is designed for any student interested in learning to use accounting software packages on the microcomputer. The course will emphasize the fundamentals in setting up a microcomputer accounting system, with particular emphasis on using payroll and inventory programs. Prerequisites: EDP 103 and BUS 120.

BUS 292 Appraisal I**3 0 0 3**

This course is a study of the principles and theory of appraising real property. Topics studied include site evaluations, building materials and components, methods of appraising property, professional organizations, and developing and operating an appraisal business. Prerequisite: None.

BUS 293 Appraisal II**3 2 0 4**

This course is a study of the methods and techniques used in estimating the value of residential properties. Topics include analysis of economic factors affecting the value of real estate; local, state, federal, and neighborhood influences; and attitudes and estimation of value. Prerequisite: BUS 292.

BUS 294 Appraisal III**3 2 0 4**

This course is a study of the capitalization of income and the income approach to value. Topics covered include an analysis of steps to estimate the value of income-producing properties such as apartments, hotels, motels, office buildings, retail stores, and industrial buildings. Other areas of study include recapture rates, capitalization rates, and appraisal of lease interests. Prerequisite: BUS 293.

BUS 296 Property Management**3 0 0 3**

This course is a study of the nature of property management, the types of property,

lease preparation, protection of property, and property maintenance. Other topics include fair housing, tenant selection, advertising, ethics, budgeting, and associations with people. Prerequisite: None.

BUS 1103 Small Business Operations 3 0 0 3

This course is an introduction to business operation. Areas of instruction include basic business law, business forms and records, financial problems, ordering and inventory control, layout of equipment and offices, and employer-employee relations. Prerequisite: None.

BUS 1122 Vocational Keyboarding 3 0 0 3

This course is an introduction to the touch typewriting system on the microcomputer with emphasis on correct techniques, alphabetic data entry, numeric data entry using the ten-key numeric pad, and proofreading procedures. Prerequisite: None

CAD 151 Computer Graphics 2 2 0 3

This is a course designed to provide fundamental knowledge of the principles of computer graphics. Basic skill and techniques of basic programming with respect to graphic application being taught are also covered. Corequisites: DFT 101 or ARC 106, or permission of department chairperson.

CAD 152 Computer-Aided Drafting I 1 0 3 2

This course will give the student advanced training in the use of micro-CAD applications. These applications will use several types of CAD software with an emphasis placed on specific types of drafting projects. Prerequisite: CAD 151 or permission of department chairperson.

CAD 153 Computer-Aided Drafting II 2 2 0 3

This course will instruct the student on setting up 3-D design and cell files and provide instruction and experience in construction and manipulating 3-D figures using a microcomputer. The students will also be introduced to a mainframe computer system to do hidden line/hidden surface drawings. Prerequisite: CAD 152.

CAD 154 Computer-Aided Drafting III 1 2 0 2

This course will give students additional training on a mainframe computer system. This course includes procedures for accessing the graphics subsystem, manipulating graphic displays, exercising the graphic commands from the menu and with the keyboard, and exiting the graphic subsystem at the completion of the work session. Prerequisite: CAD 153.

CAD 155 Computer-Aided Drafting Applications 1 4 0 3

This course provides an overview of types of CAD applications which can be found in the market place. The students will go on several field trips to observe the application process. Students will specialize in one area of interest using either a microcomputer or a mainframe system. Prerequisite: CAD 154.

CAR 1101 Carpentry I**5 0 15 10**

The course provides instruction in the principles and practices of frame construction beginning with the foundation sills and including floor joists, subfloors, wall studs, ceiling joists, rafters, bridging, bracing, sheathing, and interior wall partitions. The layout and construction methods of common types of roofs using standard rafter construction, truss construction, post and beam construction, and the application and selection of sheathing and roofing are covered. Consideration is given to the coordination of carpentry work with installation of mechanical equipment such as electrical, air conditioning, heating, and plumbing. Prerequisite: None.

CAR 1102 Carpentry II**5 0 15 10**

This course is a continuation of CAR 1101. Prerequisite: CAR 1101.

CAR 1103 Carpentry III**5 0 15 10**

This course covers the layout and installation of various types of wood or composition paneling, the layout and installation of cornices, and exterior trim on houses. Also, the installation of windows and doors in rough openings and the installation of hardware are covered. Prerequisite: CAR 1102.

CAR 1105 Carpentry IV**5 0 15 10**

Exterior and interior trim and the finish carpentry to complete the general carpentry program are covered as well as materials and methods used in finish carpentry such as exterior cornices, door and window trim, interior flooring, door and window facings, moldings, and cornice construction. Also included are the installation of hardware, construction and installation of built-in equipment and cabinets, and millwork as performed by the general carpenter for building construction. Prerequisite: CAR 1103.

CAR 1114 Building Codes**3 0 0 3**

This course covers a study of applicable sections of city, state, and national codes. The course material is correlated with all other carpentry courses. Prerequisite: CAR 1102.

**CAR 1115 Estimating for Residential
Construction****2 0 0 2**

This is a practical course in quantity "take off" from prints of jobs performed by the carpenter. Figuring the quantities of materials needed and costs of building various components and structures will be covered. Corequisite: CAR 1105.

**CET 105 Computer Tools for Engineering
Technology I****0 0 3 1**

This course is the first in a two-course sequence providing an introduction to some of the computational tools available to technicians. The following topics will be covered: numeric notations, use of the scientific calculator, microcomputer use, and the Microsoft Disk Operating System (MSDOS). Prerequisite: None.

CET 106 Computer Tools for Engineering Technology II	0	0	3	1
This is the second course in a two-course sequence providing an introduction to some of the computational tools available to technicians. The following topics will be covered: use of a word processor for preparation of laboratory reports, electronic spreadsheets for data analysis and graphing, and an algorithmic approach to problem solving. Prerequisite: CET 105.				
CET 160 Assembly Language Programming	3	0	3	4
This course covers assembly language programming practices and procedures. A typical industrial computer instruction set is utilized while writing programs centered around industrial control, diagnostics, testing, and computer interfacing applications. Prerequisite: CET 106.				
CET 200 Microprocessors	4	0	6	6
This course is an introduction to a typical industrial microprocessor. The theory of operation, architecture, memory, input/output, bus structure, timing and instruction set will be covered. Standard industrial test equipment will be used as an analysis and troubleshooting aid. Prerequisites: CET 160 and ELN 219.				
CET 215 Mini-Computer Maintenance I	4	0	6	6
This course is the first in a two-course sequence providing an introduction to the maintenance of a typical industrial mini-computer. The following topics will be covered: overview of computer system organization, instruction set, timing of computer systems, computer diagnostics, and troubleshooting methods. Prerequisite: CET 200.				
CET 220 Microprocessor Interfacing	4	0	6	6
This course is an introduction to microprocessor interfacing. The course is designed to familiarize the student with the operation, programming, and connection of interface circuits commonly used with microprocessors. Prerequisites: CET 200, ELN 235.				
CET 225 Mini-Computer Maintenance II	4	0	6	6
This course is the second course in a two-course sequence covering the introduction to the maintenance of a typical industrial mini-computer. The following topics will be covered: systems level programming, timing and performance of computer systems, computer I/O, interrupt systems, direct memory access, and computer diagnostic and troubleshooting methods. Prerequisite: CET 215.				
CET 232 Computer Peripherals	4	0	6	6
This course covers the operation and maintenance of the peripheral devices found on a typical industrial micro- or mini-computer. Areas covered include troubleshooting procedures, maintenance techniques, and the operational characteristics of the following common peripherals: video display terminals, printers, modems, disk storage systems, and tape storage systems. Prerequisite: CET 215.				

**CET 242 Concepts of Computer Networking
and Data Communications**

2 0 3 3

This course is an overview of the technical aspects of data communications and computer networking. Major topics include terminology, transmission media, modems and modulation, network models, interface standards, packet switching, gateways, LAN components, linking PCs to minis and mainframes, and networking installation. Prerequisites: CET 215 and CET 220.

CHM 010 Pretechnical Chemistry

3 2 0 0

This is an elementary course in chemistry equivalent to a high school level of difficulty. It provides the necessary foundation in chemistry for students who enter (1) a physical science technical curriculum which requires chemistry at the beginning or (2) a technical program based on the biological sciences. Topics and laboratory experiments are planned to teach chemistry which is related to the various chemical aspects of biological science. Laboratory exercises and experiments are designed to teach the fundamentals of chemistry and develop chemical laboratory skills. Prerequisite: None.

CHM 101 Chemistry

4 2 0 5

This course is a study of the physical and chemical properties of substances, chemical changes, elements, compounds, gases, chemical combinations, weights and measurements, and theory of metals, acids, bases, salts, solvents, solutions and emulsions. In addition, it includes the study of carbohydrates, electrochemistry, electrolytes and electrolysis. Industrial and agricultural applications are emphasized. Prerequisite: None.

CHM 103 Chemistry—General and Inorganic

3 2 0 4

This is a general course in inorganic chemistry which will include the study of physical and chemical properties and changes of matter. Specifically studied will be elements, compounds, mixtures, chemical reactions gases, weights and measurements, acids, bases, salts, solvents and solutions. Chemical principles will be discussed which are fundamental to an understanding of life processes. The laboratory exercises supplement and reinforce material introduced in lecture. Prerequisite: None.

CHM 104 Organic and Biochemistry

3 2 0 4

This course is to familiarize the student with the nomenclature, variety, usefulness, and most significant topics in organic and biochemistry. Prerequisite: CHM 103.

CHM 110 General Inorganic Chemistry I

3 2 0 4

The first course in general inorganic chemistry includes measurements and calculations; properties of matter, elements, compounds and mixtures; atomic structure; the periodic table; types of chemical bonds; chemical nomenclature and formulas. Prerequisite: Algebra.

CHM 111 General Inorganic Chemistry II**3 2 0 4**

This course includes the study of the chemical mole; chemical equations and calculations based on balanced equations; the gaseous state of matter; water and the properties of liquids; solutions, suspensions and colloids; acids, bases and salts; electrochemistry; reaction rates and equilibrium. Prerequisite: CHM 110.

CHM 112 Organic Chemistry**3 2 0 4**

This course provides a brief introduction to modern organic chemistry. It is designed for use in a one-semester or one-quarter course taken by students not planning to major in chemistry. The primary interest of these students may be in areas of science that require varying degrees of background in organic chemistry. Areas to be covered include bonding; alkanes; alkenes; alkynes; aromatic compounds; alcohols, phenols and thiols; ethers; aldehydes and ketones; substitution and addition reactions; organic acids and defunctional acids; fats, waxes and oils; amino acids; peptides and proteins; carbohydrates; nucleotides and nucleic acids. Prerequisite: CHM 110 and CHM 111.

CJC 101 Introduction to Criminal Justice**5 0 0 5**

This is a general course designed to familiarize the student with the philosophy and history of the criminal justice system, including its legal limitations in a democratic republic, a survey of the primary duties and responsibilities of various criminal justice agencies, a delineation of the basic processes of justice, and an orientation relative to criminal justice as a vocation. Prerequisite: None.

CJC 102 Criminology**5 0 0 5**

This is a general course designed to introduce the students to the social origins of criminal law, the administration of criminal justice, the causes of criminal behavior, and the prevention and control of crime, including the individual rehabilitation and modification of the social environment. Prerequisite: None.

CJC 103 Government—National**5 0 0 5**

Topics covered in this course include English and colonial background, the Articles of Confederation and the framing of the federal constitution, the nature of the federal union, states' rights, federal powers, political parties, and the general organization and functioning of the national government. Prerequisite: None.

CJC 104 Government—State and Local**5 0 0 5**

This course is a study of state and local government, including state-federal relationships, the functions and prerogatives of the branches, problems of administration, legal procedures, law enforcement, police power, taxation, revenues, and appropriations. Special attention will be given to North Carolina's government. Prerequisite: None.

CJC 110 Crime and Delinquency**5 0 0 5**

This course is primarily concerned with scientific efforts to understand crime and

to understand man in relation to crime phenomena. It deals with those definitions and formulations of crime and criminals upon which an adaptation system of criminology must be based. It examines the law as the basic framework within which social deviations of a peculiar character assume their functions as criminal acts and those broad principles upon which a science of criminology must rest. Prerequisite: None.

CJC 115 Criminal Law I **5 0 0 5**

This course is designed to present a basic concept of criminal law and to create appreciation of the rules under which one lives in our system of government. Prerequisite: None.

CJC 116 Criminal Law II **5 0 0 5**

This is a continuation of the study of the basic concepts of criminal law and why the law operates in its individual ways, jurisdiction, the criminal act, the mental element, and criminal responsibility. The study proceeds to detailed examinations of the numerous specific criminal areas. Prerequisite: CJC 115.

CJC 117 Constitutional Law **3 0 0 3**

This course is a study of the Bill of Rights as applied to the criminal justice process, the right to counsel; compulsory self-incrimination; the principles of search and seizure; the elements of a fair trial; interpretation of the First Amendment; double jeopardy; and the principle of equal protection of law. Prerequisite: None.

CJC 120 Administration of Justice **4 0 0 4**

This course is a review of court systems; procedures from incident to final disposition; the six primary functional areas for the administration of justice to include police, prosecutor, criminal courts, probation, institutions, and parole; and principles of federal, state, and civil laws as they apply to and affect law enforcement. Prerequisite: None.

CJC 121 Criminal Justice-Seminar and Practicum **5 0 10 6**

This is a general course designed to provide students with an opportunity to gain, under supervision, work experience in the field of criminal justice, thus providing them motivation and a sense of realism in their field of study. The five-hour seminar each week is devoted to review and discussion of field experiences. Prerequisite: Recommendation of the department chairperson.

CJC 210 Criminalistics I **3 2 0 4**

This course introduces the student to the scientific tools (resources) that are used in the study of criminal activity. Principles of biology, chemistry, and physics provide the basis for readings, lectures, demonstrations, and experiments to acquaint the student with the processes involved and the significance of the findings in conducting investigations and in the collection and preservation of evidence. Emphasis is placed upon specific types of offenses such as arson, illegal drugs, sex crimes, larceny, burglary, and homicide. Prerequisite: None.

CJC 210D Criminal Investigation 5 0 0 5

An introduction to the fundamentals of investigation; crime scene search, recording, collection and preservation of evidence; sources of information; interview and interrogation, case preparation and court presentation. The course also explores various legal elements of specific offenses and provides the student with information useful in supporting those elements in a judicial proceeding. Prerequisite: None.

CJC 211 Criminalistics II 3 2 0 4

This course is a continuation of the study of criminal investigation, including a general survey of the methods and techniques used in modern scientific investigations of crime, with emphasis upon the practical use of these methods by students. Laboratory techniques will be demonstrated, and the student will participate in actual use of the scientific equipment. Prerequisite: CJC 210.

CJC 213 Criminal Evidence 3 0 0 3

This course introduces the student to the rules of evidence and their exclusions and exceptions, procedures for the introduction of evidence and the examination of witnesses, and the doctrine on offers of proof and motions to suppress evidence. Concentration is on types and uses of evidence important to criminal justice professionals in the investigation of crimes and the prosecution of those accused of crimes. Prerequisite: None.

CJC 220 Criminal Justice Organization and Administration 5 0 0 5

This course covers the principles of organization and administration of criminal justice agencies. It includes determination of departmental objectives, policies and procedures for recruiting, selecting and training new personnel and development of organizational charts. Prerequisite: None.

CJC 260 Ethics in Criminal Justice 3 0 0 3

Public service professionals are constantly faced with ethical/moral decisions. With increased technology and shifting mores resulting in added pressures and fewer absolutes, those decisions have become at times exceedingly difficult to make. Yet they must be made and made logically. This course studies various ethical questions related to the types of decisions—professional and personal—that public service professionals face. To help them arrive at valid decisions, it also reviews basic ethical thought through the ages and concentrates on logical analyses of such problems. Prerequisite: None.

DFT 101 Technical Drafting I 1 0 3 2

The field of drafting is introduced as the student studies the basic principles of the graphic language. Skills are developed in freehand lettering, geometric figure construction, orthographic and pictorial freehand, and instrument drawing of the principle views of objects as they are represented in the graphic language. Principles of size description are also introduced. Prerequisite: None.

DFT 102 Technical Drafting II**1 0 3 2**

This course includes the application of orthographic projection principles to the more complex drafting problems, primary and secondary auxiliary views, and the introduction to sections and conventions. Dimensioning practices for details and working drawings as approved by the American Standards Association are covered. Prerequisite: DFT 101.

DFT 103 Technical Drafting III**1 0 3 2**

This course is a study of the various techniques employed to produce and render isometric and oblique drawings and isometric, diametric, and trimetric projections. An introduction to screw threads and various fasteners is included. Prerequisite: DFT 102.

DFT 112 Drafting—Electromechanical**3 2 0 4**

This course is designed to give the Electromechanical Technology student an introduction to drafting techniques and blueprint reading. The preparation of properly dimensioned rough drawings and sketches will be emphasized. Prerequisite: None.

DFT 204 Descriptive Geometry**2 0 3 3**

This course covers a graphic analysis of space problems involving points, lines, planes, connectors, and a combination of these. Practical design problems are stressed with analytical verification where applicable. Visualization is stressed on every problem. Prerequisite: DFT 101.

DFT 205 Design Drafting I**1 0 3 2**

This course is an introduction to inking, welding symbols and methods of representing and specifying them, and basic design in the study of motion and transfer mechanisms as they relate to power trains. The principles of design sketching, design drawing, layout drafting, detailing from layouts, production drawings, simplified drafting practices, and the types and methods of specifying materials and workmanship are integral parts of the course. Prerequisite: DFT 102.

DFT 206 Design Drafting II**1 0 3 2**

This course is an introduction to piping drawings and research to solve a problem in design by consulting various manuals, periodicals, and laboratory experiments. A written technical report, preliminary design sketches, layout drawings, detail drawings, assembly, and subassembly drawings and specifications are required as a part of the problem. Prerequisites: DFT 205 and DFT 260.

DFT 211 Mechanisms**3 0 3 4**

This course includes mathematical and drafting room solutions of problems involving the principles of machine elements; a study of motions of linkages, velocities, and acceleration of points within a link mechanism; and layout methods for designing cams, belts, pulleys, gears, and gear trains. Prerequisites: DFT 206, MAT 103, MEC 104.

DFT 212 Jig and Fixture Design	2 0 6 4
This course covers commercial standards, principles, practices, and tools of jig and fixture design. Individual project and design work to acquaint students with the types of jigs and fixtures and their design is also included in the course. Prerequisites: DFT 211 and DFT 223.	
DFT 223 Design Drafting III	2 0 6 4
This course introduces the fundamentals of punches and dies. The electromechanical drawings of printed circuits, wiring diagrams, and schematics are also included. Prerequisite: DFT 206.	
DFT 224 Product Design	1 0 3 2
This course brings together the original idea, scientific theory involved, applicable product history, limiting manufacturing boundaries, aesthetic importance, and marketability considered with study given to relative importance and intended design goal. Prerequisites: DFT 211 and DFT 223.	
DFT 225 Computer Graphics Design	1 0 3 2
This is a course in advanced computer graphic applications with an emphasis placed on project design. The student will have the opportunity to program, plot, store information, and use current data bases. Two-dimensional and three-dimensional graphic applications will be used to produce a finished engineering drawing. Prerequisites: CAD 151, DFT 211, DFT 223.	
DFT 260 Geometric Dimensioning and Tolerancing	1 0 3 2
This course covers Standard Drafting Practices per USASIY 14.5. It includes general dimensioning, general application of tolerance and limits, tolerance of position and form, and advantages of true position tolerancing. Prerequisite: DFT 103.	
DFT 1101 Schematics and Diagrams	0 0 3 1
This course develops the student's ability to read and interpret blueprints, charts, and instruction and service manuals. Also included in the course is information on the basic principles of lines, views, dimensioning procedures, and notes. Prerequisite: None.	
DFT 1104 Mechanical Drawing I	1 0 3 2
This is a course in basic mechanical drawing and covers shop sketching, lettering, alphabet of lines, drafting tools, drafting techniques, orthographic projection, multiview drawings, inclined surfaces. curved surfaces, and hidden lines. Prerequisite: None.	
DFT 1105 Mechanical Drawing II	1 0 3 2
This course is a continuation of basic mechanical drawing and covers visualizing,	

auxiliary views, sectional views, measurements on drawings, dimensioning, working drawings, title blocks and fasteners. Prerequisite: DFT 1104.

DFT 1106 Mechanical Drawing III

1 0 3 2

This course is a continuation of basic mechanical drawing and covers pictorial drawing (isometric, oblique, and perspective), simple assembly drawing and geometric construction. Prerequisite: DFT 1105.

DFT 1107 Blueprint Reading

1 0 3 2

This course includes interpretation and reading blueprints applicable to air conditioning, heating, and refrigeration. The development of an ability to read and interpret floor plans, elevations, sections, and details found on pictorial, perspective, isometric, oblique, and three-view drawings is covered. Prerequisite: None.

DFT 1110 Blueprint Reading I

0 0 3 1

This course covers the principles of interpreting blueprints and trade specifications common to the building trades. The development of proficiency in making three-view and pictorial sketches is included. Prerequisite: None.

DFT 1111 Blueprint Reading II

0 0 3 1

This course covers the principles of interpreting blueprints and specifications common to the building trades. Practice in reading details for grades, foundations, floor plans, elevations, walls, doors, windows, roofs of buildings, and the development of proficiency in making three-view and pictorial sketches, and estimating from blueprints are covered. Prerequisite: None.

DFT 1112 Drafting I: Plumbing

1 0 3 2

This course includes a review of blueprint reading; instruction in the selection, use, and care of basic drafting instruments; single-stroke freehand lettering; orthographic projection consisting of instruments and freehand sketching; and study of dimensioning and note practices with reference to the American Standard Association practices. The methods of reproducing drawings; detail assembly, layout and pictorial drawings; and specifications, parts list, and bill of materials are covered. The drawings of piping include metal pipe, tubing, plastic pipe, pipe joints, tube joints, pipe fittings, and valves; specification of fittings, pipe threads, and specification of threads; scale layout (two-line drawing) and diagrammatic (single-line drawing), (diagrammatic methods include orthographic, developed, and pictorial); standard symbols; dimensioning of a pipe drawing, and pipe hangers and support. The student's work includes various problems of piping layout to scale. (Note: School will furnish drafting equipment.) Prerequisite: DFT 1110.

DFT 1113 Blueprint Reading: Electrical

0 0 3 1

This course covers the interpretation of schematics, diagrams, and blueprints

applicable to electrical installation with emphasis on electrical plans for domestic and commercial installations using appropriate symbols and notes according to the applicable codes. Prerequisite: None.

DFT 1117 Blueprint Reading: Welding 0 0 3 1

This course is a study of mechanical blueprints and sketches in which welding procedures are indicated. Interpretation, use, and application of welding symbols, abbreviations, and specifications are emphasized. Prerequisite: None.

DVM 1110 Introduction to Diesel 1 0 3 2

This course is designed to familiarize the student with the basic engine components and the principles of both four- and two-cycle engine theory and operation. Competency will be demonstrated in the identification, operation and performance of selected diesel engines and components. Competency will be demonstrated in the identification and use of hand tools and shop equipment. Introduction to microcomputers as related to shop personnel will be presented. Prerequisite: None.

DVM 1111 Vehicle Servicing 3 0 9 6

This course will provide instruction in the theory and techniques of servicing heavy duty diesel trucks. Competency will be demonstrated in servicing the engine, lubrication, cooling, intake, exhaust, chassis and power train components. Upon satisfactory completion of the course competency in adjustment and operational theory of brakes, clutches, tires, rims and belts will be demonstrated. Prerequisite: None.

DVM 1112 Basic Electricity 2 0 3 3

This course is designed to familiarize the student with DC current, batteries and truck electrical components. Competency will be demonstrated in the testing and troubleshooting of batteries, starting systems, charging systems and related electrical components. Prerequisite: None.

DVM 1113 Air Brakes 2 0 3 3

This course is a study of the function and design of the braking system used on diesel trucks. Upon completion of this course a student will demonstrate competency in troubleshooting, repair, adjustments and service techniques of the truck braking components. Prerequisite: None.

DVM 1114 Diesel Engines 4 0 15 9

This course provides the development of a general understanding of the basic principles involved in the construction, operation and maintenance of diesel engines. Upon completion of this course a student will demonstrate competency in the procedures of reconditioning, maintenance and servicing of selected diesel engines. Prerequisite: None.

DVM 1114A Diesel Engines 2 0 6 4

This course is the first part of a two-part course which provides the development

of a general understanding of the basic principles involved in the construction, operation, and maintenance of diesel engines. Upon completion of this course a student will demonstrate competency in the procedures of reconditioning, maintenance, and servicing of selected diesel engines. Prerequisite: None.

DVM 1114B Diesel Engines 2 0 9 5

This course is a continuation of DVM 1114A. Prerequisite: DVM 1114A.

DVM 1115 Drive Trains 2 0 6 4

This course provides the development of a general understanding of the basic principles involved in the construction, operation and maintenance of a truck drive train. Upon satisfactory completion of this course a student will demonstrate competency in the repair, operation and servicing of clutches, transmissions, drive lines and carrier assemblies. Prerequisite: None.

DVM 1116 Suspension and Steering 2 0 6 4

This course is a study of the function and design of the truck suspension and steering system components. Upon satisfactory completion of this course the student will demonstrate competency in the operation, repair, adjustment and servicing of the vehicle suspension, steering axle and steering mechanism. Prerequisite: None

DVM 1117 Truck Charging and Starting Systems 2 0 6 4

This course will provide the development of an understanding of the principles, construction and operational features of the truck charging system components. The student will show competency in applying physics principles of electricity and magnetism to service and repair truck starter and charging systems. The student will also demonstrate competency in the troubleshooting, repair and servicing of truck starting and charging system components. Prerequisite: None.

DVM 1118 Truck Electrical Systems 1 0 6 3

This course covers the basic theory and operation of the truck's electrical components and control circuits, excluding the generator and starter. Competency will be demonstrated in the application of physics principles of electricity and magnetism to troubleshoot, service and repair the components and controlling circuits. Attention will be focused on lights, switches, gages and electrical control circuits for various truck system components. Prerequisite: DVM 1112.

DVM 1119 Diesel Fuel Systems 2 0 6 4

This course covers the theory related to a study of the variations in design and the principles of operation of fuel injection systems used on the truck diesel engines. Competency will be demonstrated in the maintenance, repair, testing and adjustment of selected fuel pumps, injectors and system components. Prerequisite: None.

DVM 1120 Diesel Truck Maintenance 2 0 6 4

This course is designed for advanced students in the Diesel Vehicle Maintenance

program. An overview and reinforcement of previous tasks will be presented. Student selection of jobs or tasks, with instructor's permission, will be encouraged. Emphasis will be stressed on time of task or job completion. Prerequisites: DVM 1113, DVM 1114, DVM 1115, DVM 1116, DVM 1119 or by permission of Department Chairperson.

DVM 1121 Truck Air Conditioning **2 0 3 3**

This course provides the development of a general understanding of the basic principles involved in the construction and operation of a truck air conditioning system. The student will demonstrate competency in installation, service, troubleshooting and repair of the system components. Prerequisite: None.

ECO 102 Economics I **3 0 0 3**

Economics I is a study of macroeconomics, which treats the economy as a whole. It is a study of Gross National Product, full employment, business fluctuations, economic growth, and the expansion of bank credit. Prerequisite: None.

ECO 104 Economics II **3 0 0 3**

This course is a further study into the function of the United States economy as well as a look into world economics. Areas of study include prices, competition, nonprice competition, and income distribution in the United States. The course also includes a study of international trade and payments, economic development, and comparative economic systems. Prerequisite: ECO 102.

ECO 108 Consumer Economics **3 0 0 3**

Consumer economics is designed to help students use their resources of time, energy, and money to get the most out of life. It gives the student an opportunity to build useful skills in buying, managing finances, increasing resources, and better understanding the economy. Prerequisite: None.

ECO 150 Microeconomics **5 0 0 5**

Microeconomics is concerned with the specific parts or economic units that make up an economic system and with the relationships between those parts. This course is devoted to the study of individual households, firms, and industries, and the ways in which such entities interact. Prerequisite: None.

ECO 151 Macroeconomics **5 0 0 5**

Macroeconomics is concerned with the economy as a whole or with large segments of it. This course is devoted to the study of employment, changing levels of prices, the nation's total output of goods and services, the ways in which government raises and spends money, and an overview of international economics. Prerequisite: None.

EDP 100 Introduction to Data Processing **3 2 0 4**

This course is an introductory course for students in the Business Computer

Programming curriculum. It is a technical study of the history, terminology, equipment, and concepts of data processing. Laboratory exercises will be used to familiarize the student with data processing equipment and hypothetical programming languages. Prerequisite: None.

EDP 101 Principles of Business Data Processing 3 2 0 4

This is an introductory course designed to acquaint the student with the field of data processing. It includes a historical review of data processing, basic terminology, and fundamental concepts of data processing and programming. Laboratory exercises are devoted to familiarizing the student with basic data processing equipment. Prerequisite: None.

EDP 102 Microcomputer Concepts 3 0 0 3

This course is designed to introduce the novice student to the fundamental concepts associated with microcomputing. Terminology, fundamental DOS operation, elementary programming concepts, and the microcomputing environment are taught. An introduction to applying microcomputers to various uses and an introduction to the literature are also provided. Prerequisite: None.

EDP 103 Introduction to Microcomputing DOS 3 0 0 3

This course is designed for the student without previous microcomputer experience. Operational concepts, and DOS terminology and commands within a specific microcomputer system are studied. The primary focus and goal is student proficiency with DOS operations. Hands-on involvement constitutes a significant portion of the student's experience. Prerequisite: None.

EDP 104 Text Processing Applications I 3 0 0 3

This course is designed for the student without previous microcomputer experience. The major emphasis will be on fundamental word processing concepts and the skills to operate a specific word processing software package. Prerequisite: BUS 100 or BUS 102. Corequisite: EDP 102 or EDP 103.

EDP 105 Assembly Language Programming I 5 2 0 6

This course is an introduction to the study of assembly language programming. It includes assembly language specifications, operations, and rules for writing source programs. The laboratory exercises are devoted to developing program logic and writing assembly language programs to solve sample problems. Prerequisites: EDP 100, EDP 107 and MAT 117.

EDP 106 Assembly Language Programming II 4 2 0 5

This course is a continuation of the study of EDP 105, Assembly Language Programming I. It covers the more complex features of the language and more advanced programming techniques. The laboratory assignments are devoted to developing program logic and writing assembly language programs to solve sample programs. Prerequisite: EDP 105.

EDP 107 Logic and Decision Making I	3	0	0	3
This course is an introduction to the concepts of providing logical solutions to the most common types of data processing programming problems. Prerequisite: None.				
EDP 108 Logic and Decision Making II	3	0	0	3
This is the second course in concepts of logical development for computer programs. More advanced concepts are covered in this course. Prerequisites: EDP 100 and EDP 107.				
EDP 110 COBOL Programming I	3	2	0	4
This course is an introductory course in compiler language programming utilizing COBOL. It includes COBOL concept, components, structure, and basic instructions. The laboratory assignments stress development of program logic and writing COBOL programs to solve sample problems. Prerequisites: EDP 100, EDP 108, and MAT 117.				
EDP 111 COBOL Programming II	3	2	0	4
This course is a continuation of the study of COBOL. It includes more complex COBOL instructions and techniques. The laboratory exercises stress developing program logic and writing programs to solve simulated industrial and business problems. Prerequisite: EDP 110.				
EDP 112 COBOL Programming II	3	2	0	4
This course is a continuation of the study of COBOL emphasizing the more complex features of the language, efficient programming techniques, and debugging techniques. The laboratory exercises stress developing program logic and writing programs to solve simulated business and industrial problems. Prerequisite: EDP 111.				
EDP 114 Text Processing Applications II	3	0	0	3
This course is a continuation of EDP 104 and is designed for the student who will utilize the word processing package in a professional or business setting. The course provides the student with knowledge of advanced word processing terms and concepts. Prerequisite: EDP 104.				
EDP 120 Introduction to Computer Programming	3	2	0	4
This course is a nontechnical introduction to the COBOL programming language. Instruction includes how COBOL is used in business to automate business procedures. The laboratory exercises will be used to develop COBOL programs that can solve business problems. Prerequisite: EDP 101.				
EDP 121 Fundamentals of Database Management	0	2	0	1
This course is designed for students who need a fundamental but functional overview of database management. <u>This course will not fulfill any of the requirements for the Microcomputer Certificate.</u> Prerequisite: None.				

EDP 122 Fundamentals of WordPerfect 0 2 0 1

This course is designed for students who need a fundamental but functional overview of the WordPerfect word processing program. This course will not fulfill any of the requirements for the Microcomputer Certificate. Prerequisite: None.

EDP 123 Fundamentals of Personal Computers 0 2 0 1

This course is designed for students who need a fundamental but functional overview of the operation of IBM or compatible personal computers. This course will not fulfill any of the requirements for the Microcomputer Certificate. Prerequisite: None.

EDP 125 Business Word Processing 3 0 0 3

This course is designed to provide business students with basic terminology, concepts, and operational skills needed to cope with virtually any word processing program within their working environment. Corequisite: BUS 100 or BUS 102, and EDP 103 or permission of instructor.

EDP 140 BASIC Language Programming I 3 0 0 3

This is a course designed to acquaint the student with the BASIC programming language. The course is designed for the student who has no background in microcomputer operation. Laboratory exercises are used to provide experience in solving business data processing problems. Prerequisite: None.

EDP 141 BASIC Language Programming II 3 2 0 4

This course will involve writing BASIC programs using structured programming techniques, manipulation of sequential and random data files, sorting and searching of data, and arrays and the use of graphics in a business environment. Prerequisite: EDP 140.

EDP 142 Introduction to C Language 3 0 0 3

This is an introductory course in C Language. Laboratory exercises are used to provide experience in solving business data processing problems using C Language. C programs may be executed on a microcomputer running MS-DOS/PC-DOS or the UNIX operating system. Prerequisite: EDP 151.

EDP 145 Introduction to the UNIX Operating System 3 0 0 3

This is an introductory course in using and understanding the UNIX operating system. Laboratory exercises are used to provide experience in solving data processing problems. Prerequisite: None.

EDP 150 Data Base Management Systems I 3 0 0 3

This course is designed to provide an operational knowledge of fundamental concepts and terminology associated with data base management systems. Structural design, data input and retrieval, indexing, sorting, calculation, and report generation

are studied within the environment of a specific data base management system.
Prerequisite: EDP 103 or permission of instructor.

EDP 151 Intermediate DOS Operations **3 0 0 3**

This course is designed to provide a more in-depth study of the disk operating system in association with program execution and interface. A focus on specialized topics as well as a comprehensive approach is taken. Student independence in problem solving, research, and working within the DOS environment is a primary focus. Prerequisite: EDP 103.

EDP 152 Financial Spreadsheet Operations I **3 0 0 3**

This course is designed to provide the student with knowledge of fundamental spreadsheet operations and the skills to operate a specific financial spreadsheet package. Template design and “what if” analysis are primary conceptual and operational focuses. Prerequisite: EDP 103 or permission of instructor.

EDP 154 Microcomputer Communications **3 0 0 3**

This course is designed to familiarize the student with the capabilities and operations of various communications and/or networking systems. Types of hardware, systems, and transmission, as well as utilities and services are studied. Students should have a thorough knowledge of DOS upon entry to this course. Prerequisite: EDP 102 and EDP 103.

EDP 156 Microcomputer Graphics **3 0 0 3**

This course is designed to familiarize the student with the fundamental concepts and operation of a microcomputing graphics package. Representational concepts studied are animation, pie charts, bar charts, line charts, and graphics report generation. Linkage within a presentation format is a primary focus. Prerequisite: EDP 103 or permission of instructor.

EDP 158 System Architecture **3 0 0 3**

This course is a study of the architectural design of a specific microcomputer disk operating system, ROM, and the relationship to software design. Introduction to macro assembler use and assembly language is a primary focus. Prerequisite: EDP 151 or permission of instructor.

EDP 159 Introduction to Computer Information Systems **4 2 0 5**

This course is a topical survey of computer information systems with emphasis upon an integrated overview of computing through its system components. Topics may include computers in business and the modern office, computer hardware and software, applications software, operating systems and shells, computer input/output, storage devices, structured programming, and the historical, current and future significance of computing in society. In order to prepare students with a basis for future educational and computing endeavors, competencies are stressed in such

lab application areas as word processing, spreadsheet operations, and data base management systems. Individual lab work and a term paper are required. Prerequisite: None.

EDP 160 Special Topics in Microcomputing 3 0 0 3

This course is specifically conceived to meet industry and special group needs which are not addressed within the scope of the existing curriculum. This course may only be used to fulfill elective curriculum requirements. Prerequisite: EDP 103.

EDP 162 Financial Spreadsheet Operations II 3 0 0 3

This course is designed to acquaint the student with intermediate concepts in the construction of spreadsheet templates and the presentation of financial information. Major topics to be covered will include data base operations, graphics presentations, financial analysis, and report generation. Prerequisite: EDP 152.

EDP 172 Financial Spreadsheet Operations III 3 0 0 3

This course is designed as a study of advanced concepts in spreadsheet analysis and design. Major topics to be covered include data communications and translation, macro language concepts, and other programming considerations. Prerequisite: EDP 162.

EDP 173 Desktop Publishing Concepts I 3 0 0 3

This course is an introduction to the fundamental concepts and terminology associated with Desktop Publishing. Operational skills necessary for the design, layout, and printing of a publication are introduced within a conceptual as well as an experiential framework. Prerequisites: EDP 103, EDP 104, or EDP 125 or BUS 240.

EDP 174 Intermediate Desktop Publishing 3 0 0 3

This course focuses on building intermediate skills in desktop publishing. This course expands upon the basic concepts of publishing from the desktop by providing extensive practical application practice using a specified software package. Emphasis is placed on actual publication of multipage documents integrating numerous components of design. Students begin to manage the documents, select options, and make system configuration choices. Emphasis is also placed on learning traditional journalism and printing terminologies and applying them to an electronic desktop publishing environment. Prerequisite: EDP 173.

EDP 201 Computer Systems 3 2 0 4

This is a study of computer systems involving such topics as job scheduling, file devices, file organization, operating systems, job control language, and multi-programming. Prerequisites: EDP 105 and EDP 110.

EDP 205 Systems Analysis and Design 3 2 0 4

This course is designed to give the student training in systems analysis and design.

Instruction in the classroom and the laboratory will be on problem definition, file organization, effective retrieval and manipulation of information, and systems design techniques. Prerequisite: EDP 111.

EDP 208 Advanced Programming **3 2 0 4**

This course is designed to acquaint students with complex programming activities and refined programming techniques. The major language to be used is that of COBOL since most business data processing installations utilize this language for most program development. Concepts included in the Computer Systems and the Systems Analysis courses will be further developed. Prerequisites: EDP 112, EDP 201, and EDP 205.

EDP 220 Research Project **1 8 0 5**

This course is designed to give the student an opportunity to initiate and carry out a carefully selected project. The student is given the responsibility to solve a significant problem with a minimum of assistance from the instructors. Prerequisite: EDP 208.

EDP 230 Introduction to FORTRAN **3 2 0 4**

This course is an introduction to FORTRAN, a problem-oriented language. The laboratory exercises are devoted to developing program logic and writing programs using FORTRAN. Prerequisites: EDP 100, EDP 108 and MAT 117.

EDP 240 PL/1 Programming I **3 2 0 4**

This course is an introduction to PL/1 programming. It includes basic PL/1 concepts, components structure, and instructions. The laboratory assignments are devoted to developing program logic and writing programs using PL/1. Prerequisites: EDP 100 and EDP 108.

EDP 242 C Programming Language **3 2 0 4**

This course is designed to acquaint the Business Computer Programming student with the C Programming Language. The fundamentals of the language, arrays, pointers, and file handling are included. Prerequisites: EDP 100, EDP 108, and MAT 117.

EDP 245 UNIX Operating System **3 0 0 3**

This is a general course in using the UNIX operating system. Laboratory exercises are used to provide experience in solving data processing problems using UNIX. Prerequisites: EDP 100 and EDP 108.

EDP 250 Data Base Management Systems II **3 0 0 3**

This course is the study of the internal and external design of menu-driven data base management systems. Incorporation of design concepts are utilized within command modules via a project approach. The primary focus is upon a specific data base management system. Prerequisite: EDP 150 or permission of instructor.

EDP 256 Microcomputer Graphics II 3 0 0 3

This course is a continuation of EDP 156. It is designed to familiarize the student with the advanced concepts and operation of computer-aided drawing, picture library access, animation, and graphics report generation. Prerequisite: EDP 156.

EDP 260 EDP Microcomputing 3 2 0 4

This course offers a very intense study of the most advanced concepts in microcomputing. Research, experimentation, and lab assignments are included in the development of concepts. Prerequisite: EDP 208.

EDP 262 Data Base Management Systems III 3 0 0 3

The focuses and objectives of this course are student independence in software applications development and the study of techniques associated with source code complication. Primary emphasis is placed upon student independence. A lab and project approach is taken. Prerequisite: EDP 250.

EDP 270 RPG II Programming 3 2 0 4

This is an introductory course in RPG II programming. Laboratory exercises are used to provide experience in producing reports and processing files using RPG II. Prerequisites: EDP 100 and EDP 108.

EDP 275 Hardware/Software Support 3 0 0 3

The intent of this course is to present the principles and techniques of microcomputer hardware interface, software installation, troubleshooting, and data exchange among software programs. Prerequisites: EDP 151 or permission of the instructor.

EDP 280 Expert/Intelligent Systems 3 0 0 3

This course introduces AI concepts and techniques. It involves the study of the internal and external design features of an expert system as related to artificial intelligence concepts. Study of a specific system in relation to design concepts is the primary focus. Prerequisite: EDP 250.

EDP 1101 Desktop Publishing for Graphic Arts 3 0 0 3

This course focuses on introducing the concept of publishing from the desktop using PageMaker publishing software package. Emphasis is placed on the planning, design, layout, editing, and printing of a publication. Text and graphics are imported into the package. Hands-on involvement constitutes a significant portion of the student's experience. Introduction to DOS fundamentals will also be included. Prerequisite: None.

EDU 101 Child Growth and Development 6 0 0 6

This course is the study of the mental and physical growth of the child from birth through adolescence. Through a brief review of recent studies in child development, the student will gain knowledge of frequently used educational research methods and research terminology. Prerequisite: None.

EDU 102 Programs for Young Children 4 2 0 5

This is a comparative study of traditional, current, and innovative preschool programs. The laboratory experience provides opportunities for the students to observe and record the growth and behavior of young children. Prerequisite: EDU 101.

EDU 103 Working with Young Children 4 0 10 5

Case presentations, film observations, and group discussions are utilized to study characteristic behaviors of each level of development and to derive guidelines for promoting desirable behaviors and for coping with undesirable behaviors. Laboratory experiences will provide opportunities to develop observation skills, effective techniques, and beginning skill in adapting activities to the needs of individual children. Prerequisite: EDU 102.

EDU 104 Art for Young Children 3 0 0 3

This course is a study of the art of young children and the development of techniques of working with young children to encourage creative expression through a variety of media. Prerequisite: EDU 103 or permission of the department chairperson.

EDU 105 Music and Creative Movement for Young Children 3 0 0 3

This course is an exploration of a wide variety of musical activities for young children with special emphasis on techniques of selecting activities appropriate to the age level and the individual needs of the children. Prerequisite: EDU 103 or permission of department chairperson.

EDU 106 Activities for Young Children: Science and Math 5 0 10 6

This is individual and group exploration of activities and materials for developing mathematics and science experiences for preschool children, which would permit the children to learn through manipulation, experimentation, and discovery. The laboratory experience provides opportunities to implement activities with children. Prerequisite: EDU 112.

EDU 107 Communicating with Young Children 3 2 0 4

This is a course designed to improve the verbal and nonverbal communication of students working with small children in the child care center. Special emphasis is on developing awareness of body language communication, listening skills and modeling of the English language for young children. Aids to the reading and telling of literature will also be taught. Each student will be given laboratory assignments for communication experiences with small children. Prerequisites: ENG 100 and EDU 101.

EDU 108 Social Studies in Early Childhood 3 0 0 3

This is a study of the social studies phenomena that are of interest to young children.

Classroom experiences will be designed to teach the student to use social studies as an integral component of the overall program for young children. Prerequisite: None.

**EDU 109 Physical Activities: Games for
Young Children**

1 2 0 2

This is an exploration of activities for promoting optimal overall physical development of young children, with special emphasis on body movements (exercise, dance, and games). The lab time is devoted to implementing games with children. Prerequisite: None.

EDU 110 Instructional Media and Resources

2 0 3 3

This course is a survey of media and appropriate learning materials for young children. It includes a study of the role of instructional media and resources in teaching and learning, and sources of free, inexpensive material. Directed practicum time is used to construct and prepare appropriate teaching aids to use with children to help conceptual development. Prerequisites: EDU 101, EDU 102, and EDU 103.

EDU 112 Language Arts in Early Childhood

3 0 0 3

This course is a comprehensive study of each facet of language arts with emphasis on techniques of designing activities and selecting materials to promote optimal overall development and to meet the specific needs of individual children. Prerequisite: None.

EDU 202 Seminar Co-op in Early Childhood

5 0 10 6

This course provides experience in a variety of child care settings to develop further skill in working with young children, in assisting with programming activities, and in adapting to the needs of individual children. Analysis of individual problems encountered in working with specific age groups will be studied. Prerequisite: EDU 106.

EDU 203 The Exceptional Child

3 0 0 3

This is a study of children with development variations requiring modification in activities. Consideration is given to recognition of problems, community resources, and appropriate activities for the child with exceptional deviations in personality or physical development. Prerequisites: PSY 102, PSY 205, and EDU 106.

EDU 204 Parent Education

3 0 0 3

This is a study of ways parents can be involved in the child development center, of the purpose and value of home visitation, and of techniques for reporting child progress to parents. The role of the early childhood specialist in aiding parents in guidance of the child's development is emphasized. Each student will develop a series of programs appropriate for presentation to the parents of preschool children. Prerequisite: EDU 103.

EDU 206 Special Problems 2 0 0 2

This course is a directed study of a specialized area of early childhood appropriate to individual career interests of students. Prerequisite: EDU 202.

EDU 211 Early Childhood Internship 4 0 20 6

This is a study to give the student practice in the care of the young child. This course will give the student more experiences in directing preschool activities. Students spend a major time block caring for and guiding young children. Opportunities to carry out planned units of study will be allowed the student in this quarter. Prerequisites: Successful completion of all practicums and permission of department chairperson.

EDU 230 Issues in Early Childhood: Discipline 1 0 0 1

This course focuses on basic concepts of discipline as an educational tool for the normal child. It emphasizes the student's development of an attitude of positive interaction with children and one another in an effort to foster the growth of affirmative behaviors in young children. Prerequisite: None.

**EDU 232 Programming for Infants: A Guide to
Very Early Childhood Education** 1 0 0 1

This course focuses on how the adult can provide good programs for children from birth to two years of age which enhance overall development and provide good physical care. Emphasis is placed on formulating and implementing individual activity plans. Prerequisite: None.

**EDU 233 Issues in Early Childhood: Infant
Feeding** 1 0 0 1

This course focuses on how care givers must understand and provide for proper feeding of infants. Emphasis is placed on the nutrition essential for good development. Prerequisite: None.

**EDU 234 Issues in Early Childhood: Child Abuse
and Neglect** 1 0 0 1

Because child abuse and neglect often reflect changes and stresses in society, this course has been designed to increase one's awareness of this form of violence and to teach the students how they can create a more nurturing, less stressful, non-violent environment for our children. Prerequisite: None.

**EDU 235 Issues in Early Childhood: School-
Age Child Care** 1 0 0 1

This course focuses on unique characteristics and needs of the school-age child. Emphasis is on planning developmentally appropriate enrichment activities. Prerequisite: None.

EDU 271 Child Care Administration 3 0 0 3

This course will focus on laws and regulations, policies, procedures, and other

administrative responsibilities of operating a child care facility. Prerequisites: Successful completion of practicums or permission of department chairperson.

ELC 101 Fundamentals of Electricity I **5 0 6 7**

This course is an introduction to the basic principles of electricity and electric circuits. The definitions of fundamental electrical units will be covered, and DC responses of various series and parallel resistive networks will be studied. Prerequisite: None.

ELC 102 Fundamentals of Electricity II **5 0 6 7**

Series and parallel resonant-circuits analysis, resonant and nonresonant transformer analysis, basic diode power supply analysis, introduction to nonlinear resistive control devices, and introduction to electromechanical devices are studied. Prerequisites: ELC 101 and MAT 101.

ELC 111 Applied Electricity **3 0 0 3**

The fundamental concepts of alternating current, including a study of capacitive and inductive effects and resulting phase angle, are covered. A study of power, current, voltage, and impedance in the AC circuit as applied to AC power machinery and control devices relating to heating and refrigeration systems are also included in the course. Prerequisite: None.

ELC 1120 Direct and Alternating Current **7 0 15 12**

The course includes a study of the structure of matter and the electron theory; the relationship between voltage, current, and resistance in series, parallel, and series-parallel circuits; analysis of direct current circuits by Ohm's Law and Kirchhoff's Law; sources of direct current potentials; fundamental concepts of alternating current flow; a study of reactance, impedance, phase angle, power, and resonance; and alternating current circuit analysis. Prerequisite: None.

ELC 1121 Electrical Installation Fundamentals **7 0 15 12**

This is an introduction to the field of electrical installation. Instruction will include a course overview, use of hand tools, wiring layouts, practice wiring, safety, and the National Electrical Code. Prerequisite: None.

ELC 1122 Residential Wiring I **7 0 15 12**

The techniques learned in ELC 1121, Electrical Installation Fundamentals, will be applied to actual wiring. Other subjects covered will include material take-off, power tools, and electrical calculations. The study of the electrical code will be continued. Prerequisite: ELC 1121.

ELC 1123 Residential Wiring II **6 0 15 11**

This is a continuation of ELC 1122, Residential Wiring I. Practice wiring will be continued. Other subjects covered will include interpretation of specifications, electrical contracts, switch gear, and electrical design. The study of the electrical code will be continued. Prerequisite: ELC 1122.

ELC 1125 Commercial and Industrial Wiring 6 0 15 11

This course covers layout, planning, and installation of wiring systems in commercial and industrial complexes, with emphasis upon blueprint reading and symbols, the related National Electrical Codes, and the application of the fundamentals to practical experience in wiring, conduit preparation, and installation of simple systems. Prerequisite: ELC 1123.

ELM 200 Mechanisms 3 0 3 4

This course is an introduction to the various simple mechanisms which are used to build up industrial machinery. Kinematic aspects as well as physical applications will be studied. Prerequisite: PHY 111.

ELM 210 Electromechanical Devices 5 0 6 7

This course covers a wide range of electromechanical devices found in industrial equipment. The theory of operation of each will be studied and an opportunity will be provided in the lab to become familiar with their operating characteristics and limitations. The common causes of trouble will also be studied. Prerequisites: ELM 200, ELN 210.

ELM 215 Electrical Control Systems 5 0 6 7

This course is an introduction to the study of the control of electrical equipment. It covers the various elements used in control systems and their use to control the electromechanical equipment which powers much of today's industrial machinery. Various power distribution systems will be discussed and the use of programmable controllers will be introduced. The laboratory will give an opportunity to implement some of these systems. Prerequisite: ELM 200, ELN 210. Corequisite: ELM 210.

ELM 220 Automatic Control Systems I 4 0 3 5

This course continues in the study of more advanced programmable controller applications. Emphasis will be on the use of the personal computer in the development, transferring, and testing of programs. The combination of programmable controllers with computer graphics data gathering and control programs will be covered. A study of robotics applications will be introduced, with significant hands-on laboratory experience. Prerequisite: ELM 210, ELM 215. Corequisite: ELN 219.

ELM 225 Programmable Controls 2 4 0 4

This course is an introduction to the use of programmable controllers in industrial applications which currently employ conventional relay logic. Although a reasonable knowledge of these relay control systems is assumed, a thorough review will be provided. Sufficient laboratory time will be allowed to insure that the student attains a hands-on working knowledge of programmable controllers. Prerequisites: ELN 236 or equivalent experience.

ELM 230 Automatic Control Systems II 5 0 3 6

This course is a continuation of Automatic Control Systems I. More advanced

automatic control systems and typical industrial process control systems will be studied. Measurement theory and PID loops will be covered, and an opportunity will be provided to investigate them in the lab. An overview of process control computers and computer-integrated manufacturing will be given. Prerequisites: ELM 220 and ELN 219. Corequisites: ELM 240 and ELN 225.

ELM 240 Electromechanical Troubleshooting **3 0 3 4**

This course will instruct students in the development of a coherent strategy for solving maintenance problems with the electromechanical equipment they are likely to encounter in industry. In order to give hands-on experience in the lab, several systems will be provided in which known problems can be inserted. Emphasis will be placed on equipment controlled by programmable controllers, and typical industrial systems such as motor speed controls and some process control instrumentation. Procedures will be stressed rather than specific equipment. Corequisites: ELM 230 and ELN 225.

ELN 110 Transistor Applications **5 2 6 8**

This course is devoted to transistor operations as a discrete control device. The content includes biasing and dynamic analysis of the common-emitter, common-collector, and common-basic configurations as they apply to amplifiers and oscillators. Some general consideration is given to the field effect transistor. Prerequisites: ELC 102 and MAT 102.

ELN 210 Linear Integrated Circuits **5 2 6 8**

This course is an extensive study of linear integrated circuits such as differential amplifiers, operational amplifiers, regulators, timers, and phase lock loops. Emphasis is placed on OP amp applications as they apply to waveshaping, amplifiers, oscillators, and filters. Prerequisite: ELN 110.

ELN 219 Digital Fundamentals **5 0 6 7**

This course is an introduction to the logic and digital circuits typically used in industrial control circuits, microprocessors and computer systems. Prerequisites: ELN 110 and ELN 210.

ELN 225 Computers and Microprocessors **5 0 6 7**

This course is an introduction to a typical industrial microprocessor. The theory of operation, architecture, memory, input/output, bus structure, timing and instruction set will be covered. Standard industrial test equipment will be used as an analysis and troubleshooting aid. Prerequisite: ELN 219.

ELN 235 Industrial Electronics I **5 0 6 7**

This course is a study of a wide variety of transducers, such as pressure, temperature, light, and velocity as they apply to industrial control devices. Prerequisite: ELN 210.

ELN 236 Industrial Electronics II 4 0 6 6

This course is a study of electromechanical devices, including electric motors and generators, motor starters, and contractors. Also, servo systems and three-phase power distribution are covered. Prerequisite: ELN 235.

ELN 245 Electronic Design Project 2 0 6 4

The course is devoted entirely to the development, testing, and evaluation of an electronic design project using all of the skills and knowledge which the student has acquired thus far. Research and development procedures are emphasized in developing a prototype model. Prerequisites: ELN 210 and ELN 219.

ELN 247 Electronic Systems: Computers 4 0 6 6

This course consists of a functional block diagram analysis of a microcomputer system currently used in industry. Classroom activity includes flow charting and the use of the instruction set in writing programs in machine language. The lab will provide practice in manipulating the hardware and software associated with such computers. Prerequisite: ELN 219.

ELN 248 Microprocessor Interfacing 5 0 6 7

This course is an introduction to microprocessor interfacing. The course is designed to familiarize the student with interface circuits commonly used with microprocessors. A short introduction to job hunting is included. Prerequisites: ELN 110, ELN 210, ELN 219, ELN 235, ELN 236 and ELN 247.

ELN 1110 Basic Electronics 1 0 3 2

This course is a general introduction to electronic systems as currently found on gasoline and diesel vehicles. Students will review AC-DC electrical and magnetic theory. The student will be introduced to solid state devices, transducers and microprocessors as they apply in a controlled environment and to the electronic equipment used in troubleshooting and testing of solid state devices. Prerequisite: DVM 1112.

ELN 1118 Industrial Electronics 3 0 3 4

This is a general introduction to the field of electronics with special emphasis on industrial applications. This course is designed to help the nonelectronic vocational student understand the basic principles of electronics as applied in a modern industrial setting. After a review of DC and AC theory, the student will see digital electronics applied in the control of motors. In addition, the student will receive a brief introduction to process control and various transducers. Prerequisite: None.

ELN 1121 Solid State Devices and Circuits 5 0 9 8

This is a course in solid state theory and the servicing of AM and FM radio and stereo receivers. Devices to be studied include the diode, transistor, FET, Zener diode, and the VCO as circuit components. The circuits studied are multiplexing and decoders. An introduction to troubleshooting of AM, FM, and FM stereo receivers is included. Prerequisite: ELC 1120.

ELN 1122 Transistor Theory and Circuits**4 0 9 7**

This is a course in semiconductor theory. Devices to be studied include the diode, transistor, FET, Zener diode, SCR, UJT, and integrated circuits. Circuits studied in lecture and laboratory sessions include power supplies, tuned amplifiers, audio amplifiers, oscillators, and detectors. An introduction to systems troubleshooting is included. Prerequisite: ELC 1120.

ELN 1123 Black and White Television Servicing**7 0 18 13**

The course covers a study of black and white television receivers, a detailed study of all circuits of the TV receiver in classroom and laboratory sessions, and supervised servicing practice to develop skills in using test equipment to repair and maintain television receivers. Prerequisites: ELN 1121 and ELN 1122.

ELN 1124 Color Television Servicing**6 0 21 13**

The course includes theory of operation of the television circuits peculiar to color receivers, composite color telecasting signals, color receiver detectors, kinescopes, convergence, and matrix networks. The theory of operations and practical test bench techniques, including troubleshooting, alignment, and convergence, are covered. Prerequisite: ELN 1123.

ELN 1125 (A) Digital Logic Circuits**3 0 6 5**

This course is a study of Binary notation based on the binary numbering system. The conversion of analog to digital, analysis of logic gates, solid state display of AND gates, OR gates, NAND gates, NOR gates and exclusive OR gates will be included in the study. Prerequisite: ELN 1124 or permission of the department chairperson.

ELN 1125 (B) Digital Logic Circuits**2 0 3 3**

This course is a continuation of ELN 1125A - Digital Logic Circuits (A). This part of the course is a study of circuits used in home entertainment devices including logic display systems, counters, registers, and memories. Operational amplifiers and linear integrated circuit microprocessors are also studied. Prerequisite: ELN 1125A.

ELN 1126 (A) VCR Servicing**3 0 6 5**

This course is designed to train the student in the basic theory related to troubleshooting and repair of VHS and Beta video cassette recorders. Camcorders that have both recording and playback capabilities will also be introduced. A practical approach to troubleshooting and repair of VCR's will be presented by the use of block diagrams in two main categories, records and playback circuits. Prerequisite: ELN 1125A&B or permission of the department chairman.

ELN 1126 (B) VCR Servicing**2 0 3 3**

This course is a continuation of ELN 1126 (A) with emphasis on schematic reading, use of special troubleshooting test instruments, and practical hands-on troubleshooting. Prerequisite: ELN 1126 (A).

ELN 1127 (A) Compact Disc Servicing 3 0 6 5

This course will provide a study and familiarization with commercial systems of recording and playback of audio and video information recorded on discs. Systems for entertainment and data storage are covered. Advantages and disadvantages of analog audio video disc systems and digital laser produced discs are presented. Servicing and troubleshooting of compact discs will be introduced. Prerequisite: ELN 1125A&B or permission of department chairperson.

ELN 1127 (B) Compact Disc Servicing 2 0 3 3

The theories and troubleshooting of the compact disc are studied in detail. Special test equipment, schematic readings, system diagnosis and repair are emphasized. Prerequisite: ELN 1127 (A).

ENG 001 Spelling 3 0 0 0

This course in basic spelling emphasizes the relationship of symbols to their corresponding sounds. It stresses spelling rules, mnemonics, and techniques in the perceiving of sounds and retaining the memory for words as a configuration. Proofreading and dictionary use are also emphasized. Prerequisite: None.

ENG 005 Language Development I 2 2 0 0

This is the first in a series of courses which concentrate on basic reading skills that enable a student to analyze words through phonetic word attack. Prerequisite: Recommendation by the department chairperson.

ENG 006 Language Development II 2 2 0 0

This is a continuation and specialization in language skills. Prerequisite: Recommendation by the department chairperson.

ENG 007 Language Development III 2 2 0 0

This is a continuation and specialization in language skills. Prerequisite: Recommendation by the department chairperson.

ENG 008 Language Development IV 2 2 0 0

This is a continuation and specialization in language skills. Prerequisite: Recommendation by the department chairperson.

ENG 010 Basic Writing Skills 5 0 0 0

This course is designed to reinforce the writing skills of those students who are not ready to attempt successfully the materials in ENG 101, Introduction to Written Communication. This course enables the student to develop competency in flow of writing, organization, sentence structure, punctuation, and proofreading. Prerequisite: ENG 021 and ENG 001, if diagnostic tests indicate a need for these courses. Corequisite: ENG 022, if needed.

ENG 017 Principles of the Alphabetic System I 5 0 0 0

This is the first of three reading courses designed to teach the phonemic structure

of the English language. Prerequisite: Recommendation by the department chairperson.

ENG 018 Principles of the Alphabetic System II 5 0 0 0

This course is a continuation of the process of teaching reading through the phonemic structure of the English language. Prerequisite: ENG 017.

ENG 019 The Phonetic Approach to Language

Structure 5 0 0 0

This course stresses dictionary skills and incorporates the phonemic process of reading and writing. Students practice by reading books, applying comprehension skills and writing original compositions. Prerequisite: Recommendation by the department chairperson.

ENG 021 Basic Reading Skills and Vocabulary I 3 0 0 0

This basic reading course is structured to enable students who are experiencing decoding difficulties to improve their word attack skills. Dictionary usage, comprehension, and vocabulary development are also included. Prerequisite: Demonstration of minimum proficiency in word attack skills as determined by departmental test battery.

ENG 022 Basic Reading Skills and Vocabulary II 3 0 0 0

This course is designed to enable students to develop the ability to analyze words and to increase their vocabulary. Major emphasis is placed on developing comprehension skills. Prerequisite: Demonstration of a minimum proficiency in comprehension and word attack skills as determined by the departmental test battery or completion of ENG 021.

ENG 023 Basic Reading Skills III 3 0 0 0

This course is an advanced reading course that stresses speed and accuracy in reading comprehension with emphasis on attaining satisfactory performance levels on standardized tests. Additional topics studied include test-taking techniques, vocabulary building and reading in the content areas. Prerequisite: Demonstration of an 11+ grade reading level based on a departmental standardized test or successful completion of ENG 022.

ENG 050 English for International Students 5 0 0 0

An introductory level course designed to prepare ESL (English-as-a-Second Language) students for more capable performance in curriculum coursework. Emphasis is placed on the following skills: pronunciation, vocabulary, spelling, word order and sentence patterns, and fluent expression. Prerequisite: A demonstrated fourth grade reading level, based on a departmental standardized test (TABE M) and referral by the Pretechnical Department Chairperson.

ENG 100 Oral Communication 3 0 0 3

This course provides students the opportunity to improve their skills for public

speaking, interpersonal communication, and group participation. Included are formal and informal speeches, class exercises, and conferences. Prerequisite: None.

ENG 101 Introduction to Written Communication 3 0 0 3

A study of the writing process with emphasis on developing short essays. Exercises in style and mechanics as needed. Prerequisite: Passing score on screening tests or English 010 and/or English 111.

ENG 102 Composition 3 0 0 3

A study of the writing process with emphasis on the basic logical modes and critical analysis to develop research papers. Exercises in style and mechanics as needed. Prerequisite: ENG 101 or equivalent transfer credit.

ENG 103 Technical Report Writing 3 0 0 3

A study of the writing process with emphasis on technical reports using topics related to the student's major curriculum. Unit on employment letters is included. Prerequisite: ENG 102 and enrolled in third quarter of curriculum (minimum) or by permission of department chairperson.

ENG 111 Grammar Skills 3 0 0 3

English 111 is designed to bridge the gap between English 010, Basic Writing Skills, and English 101, Introduction to Written Communication. Its main purpose is to prepare students for the editing and proofreading requirements in English 101 and the upper-level writing courses. Basic grammar, punctuation, and mechanics review are the major units of study. Although drill and practice are the main teaching techniques, writing assignments will be used to make sure students can identify and punctuate major structures of the language. By the end of the course, students should be able to edit prose (their own and others') according to the standards of current English usage. Prerequisite: None.

ENG 115 Appreciation of Literature 3 0 0 3

Students will read and analyze works from various periods and cultures in the major prose and poetry genres. Through group discussions and individual papers they will relate literature to other fields of study (eg. history and psychology) so that they will better understand how literature reflects life and culture. Prerequisite: None.

ENG 116 Children's Literature 3 0 0 3

This is a survey of literature for young children. The student will gain an appreciation and awareness of a variety of types of literature to be presented to the child during the preschool years. Prerequisite: EDU 107 and EDU 112.

ENG 120 Interviewing and Reporting 1 0 0 1

Through in-class lectures, guest lectures, and text exercises, the student will learn procedures for interviewing and for reporting the news. Writing skills will be emphasized. Prerequisite: Eligibility for ENG 101.

ENG 121 Interviewing and Reporting Practices 0 2 0 1

Students will produce the school newspaper, Technically Speaking. Corequisite: ENG 120 as required by instructor.

ENG 122 Modern Lay-Out Techniques 1 0 0 1

Through lectures, demonstrations and hands-on experience, the student will learn to use the Apple Macintosh Plus computer for desktop publishing. Opportunities will also be offered to use the IBM computer for graphics. Prerequisite: None.

ENG 123 Lay-Out Practices 0 2 0 1

Students will begin lay-out of the school magazine, FTCC TECHTALK. Corequisite: ENG 122.

ENG 124 The Popular, Literary, and Art Magazine 1 0 0 1

By a broad survey of a variety of magazines published by institutions, the student will formulate a concept of the content and layout of such a magazine. Prerequisite: ENG 102 or permission of the instructor.

ENG 125 Magazine Practices 0 2 0 1

Students will produce the school magazine, FTCC TECHTALK. Corequisite: ENG 124.

ENG 150 Freshman Composition I 5 0 0 5

A study of the writing process with emphasis on short themes and research papers. Students will develop skills in prewriting, writing, and reviewing while completing written and oral assignments based on various kinds of prose. They will also learn how to use these skills for writing in other disciplines. Prerequisite: Satisfactory score on placement test or permission of department chairperson.

ENG 151 Freshman Composition II 5 0 0 5

A continuation of the applications and principles in ENG 150 with emphasis on analyzing and critiquing selected literary works. Prerequisite: ENG 150.

ENG 200 Advanced Speech 3 0 0 3

English 200 is a course for students who have successfully completed English 100 (Oral Communication) or its equivalent and who recognize the need for further development of their oral communication skills. Emphasis is on presentation and preparation of full-length speeches, development of argumentative skills, and impromptu talks. Prerequisite: ENG 100.

ENG 201 English Literature I 5 0 0 5

A study of selected British writers from the Anglo-Saxon period through the Restoration with emphasis on various genres as background for the writing of student themes. Prerequisite: ENG 151.

ENG 202 English Literature II **5 0 0 5**

A study of selected British writers from the Romantic Age to the present with emphasis on various genres as background for the writing of student themes. Prerequisite: ENG 151.

ENG 205 Report Writing **3 0 0 3**

A study of the writing process with emphasis on business reports. Both formal and informal reports are developed. Prerequisite: ENG 102 or permission of the department chairperson.

ENG 206 Communications **3 0 0 3**

A study of the writing process with emphasis on business letters and memos. An employment unit is included. Prerequisite: ENG 102 or permission of department chairperson.

ENG 207 Educational Report Writing **3 0 0 3**

This is a written communication course stressing business letters, memos, reports, and employment interviewing. Special emphasis will be on types of communication written in child care centers, anecdotal records, school newsletters, progress letters and reports, request letters for conferences, accident reports, press releases, etc. In conjunction with the summer quarter courses (EDU 112 and EDU 110), each student will prepare a report on teacher-made materials as a project for both the English and education courses. Prerequisites: EDU 101, EDU 102, EDU 103, and ENG 102.

ENG 210 American Literature I **5 0 0 5**

A survey of selected major American writers from the Colonial Period through the Romantic Age with emphasis on various genres as background for the writing of student themes. Prerequisite: ENG 151.

ENG 211 American Literature II **5 0 0 5**

A survey of selected major American writers from the Age of Realism to the present with emphasis on various genres as background for the writing of student themes. Prerequisite: ENG 151.

ENG 250 Patterns in World Literature **5 0 0 5**

This introductory course considers the recurring themes, motifs, and patterns of classical and folk literature, relating these to current expression. Students will explore both in and out of class, collectively and individually, the patterns that have concerned mankind throughout time. Development of oral and written presentations will be stressed. Prerequisite: ENG 151 or permission of instructor.

ENG 1101 Communications I **3 0 0 3**

A course in communication skills stressing reading, writing, speaking, and listening. The course includes library research, planning and delivering effective oral

presentations, participation in group discussions, and practice in developing listening skills. Prerequisite: None.

ENG 1112 Communications II

3 0 0 3

A course in communication skills with emphasis on written communication in business and industry. Included are units on business letters, job employment, records, forms and reports. Prerequisite: None.

FSE 101F Intro to Funeral Service

3 0 0 3

This course includes the principles of funeral service and its history. Emphasis is placed on the ethical obligations and fundamental requirements involving skill, aptitude, and qualifications of funeral directors. Upon completion, students will be able to recognize historical names, places, and events from the past which directly effect the future of funeral service. Prerequisite: None.

FSE 113F Funeral Law

3 0 0 3

This course provides the student with insight into the fundamentals of mortuary law. Emphasis is placed on North Carolina Mortuary Law, OSHA, anatomical donations, vital statistics, and general law relative to mortuary law. Upon completion, students will be able to complete death certificates, notification of death forms, medical examiner forms, and other required forms. Prerequisite: None.

FSE 121F Funeral Service Practices

3 0 0 3

This course helps develop a knowledge of funeral service procedure of various religions and provides a study of the customs and funeral practices in the U.S. Topics include the study of liturgical and non-liturgical Protestant, Catholic, Jewish, and many other religious groups. Upon completion, students will be able to discuss the different religious and fraternal groups and know how their services are conducted. Prerequisite: None.

FSE 224F Funeral Home Operations

4 0 0 4

This course will outline all phases of funeral home operations, and students will develop a basic approach to successful business techniques. Topics include establishing a funeral home, choosing and financing a location, building, remodeling, merchandising, caskets, vaults, and planning. Upon completion, students will be able to discuss proper procedures in operating, supervising, and owning their own funeral home. Prerequisite: None.

FSE 257F Pathology I

3 0 0 3

This course is designed to provide the student with general knowledge of the disease process. Topics include pathological terminology, basic body functions, trauma, disease process, and etiology. Upon completion, students will be able to recognize various terminology used in the medical profession and will have a more acute awareness of the disease process. Prerequisite: None.

FSE 268F Funeral Counseling 3 0 0 3

This course is a study of the principles of counseling that will be of assistance to funeral directors whose work requires counseling ability. Topics include the personality and role of the counselor, techniques of counseling, and philosophies of counseling. Upon completion, students will be able to relate more effectively to those who are experiencing the grief process. Prerequisite: None.

HEA 102 Personal Health 5 0 0 5

This course consists of a study of influences on physical and mental health, individual practices including personal nutrition which aid in maintaining good physical and mental health throughout the life span, and responsibilities of those working with young children to maintain personal health and to serve as models for health practices. Prerequisite: None.

HEA 113 Health and Safety for Young Children 3 2 0 4

This is a study to promote understanding of factors which influence physical and emotional health of infants and young children. Emphasis will be given to preventative measures such as designing a safe and stimulating outside play area. The course will embrace first aid techniques and allow for observation of children in play situations. The influence of child care workers on health and safety and on the teaching of health habits is emphasized. Prerequisite: None.

HET 1101 Heating Systems 6 0 12 10

This course includes oil burner fundamentals; operation, control, and service of oil burner systems; gas heating devices; operation, control and service of gas burner systems; installation and service of electric heating elements and their controls; principles of operation of hot water and low pressure systems; and the installation and service of piping, controls, pumps, and coils. Prerequisite: AHR 1105.

HET 1101A Heating Systems (Part I) 3 0 6 5

This course is the first of a two-part course and it includes oil burner fundamentals; operation, control, and service of oil burner systems; gas heating devices; operation, control and service of gas burner systems; installation and service of electric heating elements and their controls; principles of operation of hot water and low pressure systems; and the installation and service of piping, controls, pumps, and coils. Prerequisite: AHR 1105.

HET 1101B Heating Systems (Part II) 3 0 6 5

This course is the continuation of HET 1101A. Prerequisite: AHR 1105 and HET 1101A.

HIS 101 History of Western Civilization I 5 0 0 5

A survey of social, political and economic developments from antiquity to the Enlightenment. Prerequisite: Satisfactory score in reading on placement test.

HIS 102 History of Western Civilization II**5 0 0 5**

A survey of social, political and economic developments from the Age of Absolutism to the present. Prerequisite: Satisfactory score in reading on placement test.

HIS 111 American History**5 0 0 5**

A survey of the development of the United States from its old world background to the present. Emphasis will be placed on major economic, political, and social forces which have contributed to the building of American culture. Prerequisite: Satisfactory score in reading on placement test.

HIS 150 American History to 1865**5 0 0 5**

This course describes American History from the period of exploration and the colonial period through the Civil War. Emphasis will be placed on the European background of American History, establishment of English colonies in America and colonial historical development; the conflict with England and the securing of independence; the establishment of independent government and the inauguration of a new nation; territorial expansion and the westward movement; the growth of democracy and social reforms; development of national feeling and sectional tensions; the institution of slavery and the slavery controversy; and the Civil War. Prerequisite: Satisfactory score in reading on placement test.

HIS 151 American History since 1865**5 0 0 5**

In this course, emphasis is placed on the political, constitutional, economic and social problems resulting from Reconstruction and the rise of "Big Business"; the emergence of the United States as a world power; World War I, prosperity, the Depression and the New Deal; the Second World War; the Korean and Vietnam conflicts; and the position of the United States in the contemporary world community. Prerequisite: Satisfactory score in reading on placement test.

HRT 130 Introduction to Floral Design**1 2 0 2**

This course will be an introduction to the principles and mechanics of floral design. It will include the study of design principles, the geometric forms of flower arrangements and the mechanics of assembling floral arrangements. Floral designs for such occasions as weddings, receptions, holidays, and funerals will be included. Prerequisite: None.

HRT 140 Home Maintenance**2 4 0 4**

This course concentrates on the jobs associated with maintaining a lawn and home surroundings throughout the year. Instruction includes shrub fertilization, tree fertilization, disease control of lawns and shrubs, pruning, proper irrigation of shrubs and lawns, and proper use of herbicides and pesticides. It is designed for people interested in making home maintenance their choice of career work. Prerequisite: None.

HRT 145 Entomology and Pathology**4 2 0 5**

This course is a study of insects that attack ornamental plant materials. The nature,

structure, and importance of each insect are studied in detail. Additional emphasis is placed upon detection, identification, and control of the insects studied. Methods for controlling diseases of ornamental crops are learned by studying the structure, life history, and identification of the various parasitic disorders which plague ornamental trees, shrubs, flowers, and turf. Prerequisite: None.

HRT 150 Interior Plants 3 0 0 3

Instruction in this course includes simple botany, taxonomy, physiology, identification, culture, and care of house plants. One hundred of the more common indoor plants will be studied and identified. Prerequisite: None.

HRT 151 Plant Identification I 3 4 0 5

This course is an introduction to the woody plant materials grown in nurseries for landscape purposes and those found in woodlands and fields of North Carolina. The major emphasis is on deciduous shrubs and small trees.

Prerequisite: None.

HRT 152 Plant Identification II 3 4 0 5

Additional trees and shrubs are studied in this course. The major emphasis is placed upon a detailed study of broad-leaved and narrow-leaved evergreens. Prerequisite: HRT 151.

HRT 153 Greenhouse Management 3 2 0 4

Greenhouse Management concentrates on procedures and practices of greenhouse plant production. This course also provides instruction in the construction and management of plastic and glass greenhouses, including heating, lighting, ventilation, and humidity. Crop studies include both cut flowers and pot plant crops. Prerequisite: None.

HRT 170 Plant Science 4 2 0 5

This is an introductory general botany and plant science course covering the fundamental principles of reproduction, growth functions, and development of seed bearing plants. Prerequisite: None.

HRT 180 Bedding Plant Production 2 2 0 3

This course is designed to enable students to start plants from seed and grow them to a marketable stage through use of proper cultural practices. Prerequisite: None.

HRT 185 Soil Science and Fertilizer 5 2 0 6

This course deals with the basic principles of efficient classification, evaluation and management of soils. Upon completion of this course, the student should be able to demonstrate proper care, cultivation, fertilization, and conservation of soil. Prerequisite: None.

HRT 200 Practicum 0 0 30 3

This course will expose students to the physical aspects of jobs available in their

chosen field and provide them opportunities for the development of personal relationships. Students will acquire the skills and practical knowledge necessary for success in their chosen career fields. Prerequisite: Must be second-year horticulture student.

HRT 201 Horticultural Chemicals

3 0 0 3

This course is designed to enhance the student's understanding of horticultural chemicals. Instruction will focus on the importance of horticultural chemicals, ingredients, formulation, and application with special emphasis on the effective and safe utilization of chemicals in horticultural pest control. Although the major emphasis is weed identification and those chemicals utilized for weed control, part of the course will be devoted to insecticides, fungicides, and others. Prerequisite: None.

HRT 210 Field Analysis

5 0 0 5

Students will keep records of the experiences in HRT 200 Practicum. They will relate such experiences to the following major areas of instruction: plant materials, plant science, soil science and fertilizers, horticultural chemicals, landscape construction, landscape gardening, plant propagation, and nursery management. Records compiled by the student will be summarized in the form of a weekly report and reviewed by the instructor. These reports will culminate in a final term paper. Prerequisite: Must be a second-year horticulture student who is also registered for HRT 200 practicum.

HRT 220 Vegetable and Flower Gardening

4 0 0 4

Upon completion of this course, the student will be able to plan effectively a complete vegetable garden that will encompass the entire year. The student will also learn how to grow vegetables properly by use of insecticides, herbicides, and proper fertilization. If possible, the students will have a garden to take care of so that they might carry out the practices they learn. This is to be a self-study course with help from the supervising instructor. Prerequisite: This course is for second-year horticulture students who are enrolled in HRT 200 practicum.

HRT 240 Landscape Construction I

4 2 0 5

This course deals with the actual construction of brick patios, walks, steps, brick borders, brick walls around trees, lawn furniture, picnic tables, or other wood projects which may be used in a home landscape. It will also cover estimating the job cost of these various projects, including drawing plans to scale. Prerequisite: None.

HRT 241 Landscape Construction II

4 2 0 5

This course will be a continuation of HRT 240, Landscape Construction I, with added emphasis on students actually carrying out projects from planning stage to completion. Other skills will be acquired through additional projects. Prerequisite: HRT 240.

HRT 251 Landscape Design I**3 4 0 5**

This course is an introduction to and study of the basic principles of landscape design. Considerable emphasis is placed on the problems associated with residential site development, including blueprint reading. Laboratory time is devoted to visiting established residential sites. The course is not oriented toward a mastery of creativity and artistry, but toward an understanding of certain principles fundamental to all landscape design endeavors. Prerequisites: HRT 151 and HRT 152.

HRT 252 Landscape Design II**3 4 0 5**

Upon completion of this course, the student will be able to develop and maintain landscaped areas including planting, pruning, fertilization, and pest control. In addition to acquiring skills in selection and use of materials in landscape construction, the student will also receive instruction in the fundamentals of landscape economics, including costs, contracts, and calculation of areas, volumes, and plant quantities. Prerequisites: HRT 151, HRT 152, and HRT 251.

HRT 254 Plant Propagation**3 2 0 4**

This course is a study of the basic concepts and principles of sexual and asexual propagation. Propagation techniques are utilized in the industry and studied through practical exercises conducted in laboratory sessions. Prerequisite: None.

HRT 256 Nursery Management I**2 4 0 4**

This is an introductory study of nursery operations designed to acquaint the student with the diversity of nursery plant production, equipment, and operation. The theory and practices necessary to produce profitable nursery stock will be acquired through the study of such areas as pruning, fertilization, plant protection, and others. Prerequisite: None.

HRT 257 Nursery Management II**2 4 0 4**

This course is a continuation of HRT 256, Nursery Management I, with increased emphasis placed upon production schedules and choice and quantities of stock to be grown as well as developing cost data, price schedules, and record keeping for economically important nursery crops. Planning of nursery layout and facilities is also covered. Prerequisite: HRT 256.

HRT 258 Turf Practices**3 2 0 4**

This course is a study of special-purpose turf grasses, including identification, use, establishment, and maintenance of specific grasses. Laboratory time is used for field trips to golf courses where students observe and participate in those operations required to maintain a healthy, vigorous playing surface. Prerequisite: HRT 185.

HRT 259 Garden Center Management**1 2 0 2**

This course covers all phases of garden center operation, including some of the major problems. Areas of study include layout, stocking, product knowledge,

traffic flow, seasonal fluctuations, risks, diversification, and merchandising. Ample time will be devoted to visitations to established garden center operations. Prerequisite: None.

HUM 1101 Humanities for Vocational Students 3 0 0 3

This course is designed to help students recognize the importance of values through cultural, economic, political and geographical considerations affecting themselves and their relationship with others, both personally and professionally. Prerequisites: None.

ISC 202 Quality Control 3 2 0 4

This course is a study of the principles and techniques of quality control and cost savings; organization and procedure for efficient quality control; functions, responsibilities, structures, costs, reports, personnel, and vendor-customer relationships in quality control; and sampling inspections, process control, and tests for significance. Prerequisite: None.

ISC 203 Motion and Time Study 3 2 0 4

This course includes a study of operations analysis, types of process charts, breakeven analysis, micromotion analysis, work measurement techniques, predetermined time systems (MTM), and development of standard data for incentive systems. Prerequisite: None.

ISC 209 Plant Layout 3 2 0 4

This course is a practical study of factory planning with emphasis on the most efficient arrangements of work areas to achieve lower manufacturing costs. Included are layouts for small and medium-sized plants; layout fundamentals; selection of production equipment and materials handling equipment; and the effective management of people, money, and materials in a manufacturing operation. Prerequisite: None.

LEG 103D Evidence of Paralegals 4 0 0 4

A study of basic evidence law principles and the relationship of these principles to the investigation and preparation stages of civil and criminal court actions. Prerequisite: None.

LEG 115D Paralegal in the Legal System 3 0 0 3

An introduction to the role of the paralegal in the legal system, government and business, plus study of the legal restrictions of the practice of law and ethical responsibilities of the lawyer and the paralegal in the legal system. Prerequisite: None.

LEG 132D Law Library Research & Mgt. 3 2 0 4

Methods of legal research, proper citation of authority, acquaintance with legal resources such as statutes and case reporters, shepardizing of cases, synthesis of

decisions, use of computers in legal research. Also, introduction to legal writing form and technique, including preparation of simple briefs and memoranda. Prerequisite: None.

LEG 133D Law Library Research & Mgt. 2 0 0 2
This course is a continuation of LEG 132D with emphasis on computer-assisted legal research. The course will also explore the creation, organization, and maintenance of a law library, the student will learn to select, order, catalog, file, and update a current legal collection. Prerequisite: LEG 132D.

LEG 135D Legal Systems 4 0 0 4
An introduction to the legal systems in federal courts and in North Carolina state courts from the trial level to the highest appellate levels. Emphasis will be on court procedures in civil cases. Included will be a study of the clerk of superior court functions in the North Carolina legal system. Prerequisite: BUS 201 or permission of the instructor.

LEG 136D Legal Systems 4 0 0 4
A continuation of LEG 135D with emphasis on practical application and an introduction to often used procedural forms. Prerequisite: LEG 135D.

LEG 207D Legal Software 1 4 0 3
An introduction to software programs developed for the practice of law which will include the following areas: estate planning, real estate transactions, law office management, and family law. Prerequisite: None.

LEG 213D Law & the Family 3 0 0 3
The legal obligations in a marriage; rights and privileges of the parties; the statutory grounds for divorce; defenses to divorce actions; elements of a legal separation by a court order or by mutual consent. Family problems, juvenile courts, legal proceedings in adoption and custody cases will also be studied. Prerequisite: None.

LEG 214D Domestic Law Documents 2 0 0 2
This course is designed to supplement Law and the Family for paralegal students. The course will introduce the student to the preparation of documents required for domestic relations problems including divorce, child custody and support, alimony, enforcement of support orders, and adoption. Prerequisites: LEG 213D, LEG 136D.

LEG 223D Investigation of Civil Claims 4 0 0 4
An in-depth study of investigative methods necessary for gathering, preserving, and analyzing evidence for effective presentations of civil actions. Included are interviews, preservation of witness statements, collection and interpretation of medical information, collection of other evidence, scene diagrams, legal research, organization and assemblage of evidence for attorney use. Prerequisites: BUS 201D, LEG 135D.

LEG 225D Law Office Management**4 0 0 4**

A study of the organization and management of law offices, with emphasis upon administrative systems and procedures for efficient law office operation. Included are studies of personnel management; law office equipment, furnishings and layout; filing systems; systems for keeping track of deadlines; and accounting, billing, and timekeeping systems. Prerequisite: None.

LEG 227D Estate Management**4 0 0 4**

This course teaches interview techniques and gathering of data for preparation of wills and estate plans. Basic estate and trust principles will be included. Also, the student studies procedures for administration of estates of deceased persons, minors, and incompetents, including preparation of inventories, accounts, inheritance and estate tax returns, and other administrative documents. This introduction is expanded into more detailed coverage in LEG 228D. Prerequisite: None.

LEG 228D Estate Management**3 2 0 4**

A continuation of LEG 227D, Estate Management. Prerequisite: LEG 227D.

LEG 230D Bankruptcy & Collection Proc.**4 0 0 4**

The student will be introduced to the federal bankruptcy laws and the procedures and documents required of persons involved in bankruptcy and debt adjustment proceedings. Also covered will be the processes used by attorneys for the collection of debts, including enforcement of judgments. Prerequisites: BUS 201D, LEG 136D or permission of the instructor.

LEG 235D Litigation Preparation**4 0 0 4**

Study of the steps in aiding an attorney in preparing a civil case for trial, emphasizing preparation of a trial notebook, organization of discovery and other trial materials, and preparation of witnesses for trial. Also, preparation of workmen's compensation claims is included. Prerequisites: LEG 136D and LEG 223D.

LEG 261D Clinical Practice**1 0 10 2**

This course provides the student with an opportunity to gain, under staff supervision, practical on-the-job experience in the paralegal field as an integral part of his formal education. Periodic conferences between the student, instructor, and employer and periodic seminars with others enrolled in clinical practice provide opportunities to assess the learning achieved by the student in the work experience. Prerequisite: Four quarters in the Paralegal curriculum. Students are graded pass or fail. Prerequisite: Permission of the instructor.

LEG 280D Business Organizations Law**3 0 0 3**

A summary of the individual, partnership, and corporate forms of doing business, including professional associations, limited liability of corporations, and tax advantages. Emphasis is placed upon gathering appropriate data to support the making of the decision, gathering data to support the preparation of the documents

when the decision is made, and the processing of the documents when they have been prepared. Servicing the corporation. Scheduling of annual meetings, preparations of reports, tax returns, and the like. Prerequisite: BUS 201D.

LEG 282D Property Transactions **4 0 0 4**

An introduction to basic concepts of real property with emphasis on the mechanics of conveyances and encumbrances of real property. Basic provisions of deeds, mortgages, and deeds of trust, and the more common problems in real property titles will also be studied. Prerequisite: None.

LEG 283D Property Transactions **3 2 0 4**

A study of the mechanics of simple title searches and examinations with practical experience in the use of courthouse records and preparation of suggested title certificates for approval by the title attorney. Also studied will be the mechanics of land sale closings—including the preparation and recording of simple deeds and deeds of trust; preparation of other land sale and loan closing documents, and the handling and disbursement of land sale and loan closing funds. Prerequisite: LEG 282D.

MAS 1101 Fundamentals of Bricklaying I **3 0 21 10**

This course covers the history of the bricklaying industry, the types of brick and block, safe work practices, and the tools needed in the trade. The course is designed to provide the student with the skills needed in laying brick and block to a line, constructing simple corners, walls and piers using different bonds and joints. Prerequisite: None.

MAS 1102 Fundamentals of Bricklaying II **4 0 18 10**

This course introduces the practical application of selecting mortars, the proper use of bonds, expansion strips, and wall ties, and methods of caulking. The course will provide experiences in the construction of various building elements to include walls, chimneys, lintels, and arches. The calculation of required quantities and the cost of materials for building various masonry components and structures and experience in reading blueprints will also be included. Prerequisites: MAS 1101 or equivalent experience.

MAS 1113 Masonry Estimating **4 0 0 4**

This course introduces the procedures for estimating costs of materials and/or labor in connection with masonry projects. Emphasis is placed on the total quantities of materials/labor needed to construct a building or other masonry project. Students will perform a quantity take-off from blueprints and figure the cost of constructing the project. Prerequisites: DFT 1110, MAS 1101 or equivalent experience.

MAT 001 Structure of Arithmetic **5 0 0 0**

This course is designed to help the student gain and improve computational skills. Instruction is in the basic operations of arithmetic to include addition, subtraction, multiplication, division, fractions, decimals, and percentages. Prerequisite: None.

MAT 002 Prebusiness Mathematics**5 0 0 0**

This course is a review and reinforcement of the basic mathematical skills used in business mathematics. Prerequisite: None.

MAT 003 Introductory Algebra**5 0 0 0**

A course designed to provide the student with the basic understanding and manipulative skills of elementary algebra, with some basic applications. It includes whole numbers, fractions, signed numbers, first degree equations, exponents, polynomials, factoring, rational expressions and graphing. Prerequisite: None.

MAT 004 Intermediate Algebra**5 0 0 0**

This course is designed for those students who have had some previous instruction in algebra. Basic concepts of algebra are covered. It includes the real number system, first degree equations, polynomials, factoring, rational expressions, radicals and complex numbers, quadratic equations, functions, and logarithmic functions. Prerequisite: MAT 003 or equivalent.

MAT 005 Geometry**5 0 0 0**

This course is designed to provide the student with the basic understanding and manipulative skills of elementary geometry. Prerequisite: None.

MAT 009 Algebra and Trigonometry**5 0 0 0**

This course is for students who need a review of algebra and trigonometry. It includes basic algebra, functions, graphs, right triangles, basic identities, equations and applications. Prerequisite: MAT 004 or equivalent.

MAT 020 Mathematics for Health Education**3 0 0 0**

This course is designed for the student who is preparing for a health career. Topics covered are basic operations of arithmetic, fractions, decimals, percents, ratio and proportion, metric system, apothecaries' system, and mathematics of drugs and solutions. Prerequisite: None.

MAT 101 Technical Mathematics I**5 0 0 5**

This is a course in mathematics designed to support all technology courses. Topics covered are fundamental concepts and operations of algebra, functions and graphs, trigonometric functions, linear equations and determinants, factoring and fractions, quadratic equations, vectors, oblique triangles, and graphs of trigonometric functions. Prerequisite: Satisfactory score on mathematics placement test or MAT 004.

MAT 102 Technical Mathematics II**5 0 0 5**

This is a course in mathematics designed to support all technology courses. Topics covered are exponents and radicals, j-operator, logarithms, algebraic and trigonometric equations, inequalities, variations, progressions, advanced topics in trigonometry, and equations of higher degree. Prerequisite: MAT 101.

MAT 103 Technical Mathematics III**5 0 0 5**

This is a course in mathematics designed to support all technology courses. Topics covered are the straight line, limits, geometric and algebraic interpretation of the derivative, applications of the derivative, integration, and applications of integration. Prerequisite: MAT 102.

MAT 113 Allied Health Mathematics I**3 0 0 3**

This is the first of a series of two courses designed to develop a high level of proficiency in basic mathematical and algebraic skills for the student in a health center. Topics covered are whole numbers, fractions, decimals, percents, algebraic concepts, linear equations, functions and graphs, and trigonometric functions. Prerequisite: None.

MAT 114 Allied Health Mathematics II**3 0 0 3**

This is a continuation of MAT 113, Allied Health Mathematics I. Topics covered are logarithms, ratio and proportion, metric system, apothecaries' system, mathematics of drugs and solutions, and basic statistics. Prerequisite: MAT 113.

MAT 115 Fundamental Concepts of Algebra**3 0 0 3**

This is a general review of fundamental mathematics with emphasis on algebra and algebraic applications. Topics covered are the real number system, properties of numbers, sets, functions and relations, graphing, solution of equations and inequalities, polynomials, powers and roots, and basic trigonometry. Prerequisite: High School Algebra or MAT 003.

MAT 116 Fundamental Concepts of Statistics**5 0 0 5**

This is a course in statistics designed to support all technology courses. In scope, the course consists of frequency distribution, graphic representation, percentiles, measures of central tendency, variability, the normal distribution curve, sampling error, significance of difference between means, correlation, statistics and the design of experiment, and chi-square. Prerequisite: MAT 115.

MAT 117 EDP Mathematics**5 0 0 5**

This is a general course in algebraic concepts designed specifically to prepare data processing students for later course work. Hexadecimal-binary arithmetic, polynomial operations, fraction equations and quadratic equations are the primary topics covered. Prerequisites: None.

MAT 118 General Mathematics**3 0 0 3**

This course is an introduction to elementary school mathematics. Topics covered are the basic operations of arithmetic with fractions, solving simple equations, and an introduction to certain concepts of modern math. Prerequisite: None.

MAT 119 Principles of Mathematics**5 0 0 5**

This course is designed to give students an overview of important topics in

mathematics. Topics covered are operations of arithmetic, percents, set theory, problem solving, graphs, and an introduction to the concepts of algebra, geometry and statistics. Prerequisite: None.

MAT 120 Mathematical Concepts

5 0 0 5

This course is designed for the liberal arts students and will cover number systems, sets, consumer mathematics, the metric system, probability, statistics and the geometry of shape and measurement. Prerequisite: Satisfactory score on mathematics placement test.

MAT 121 Statistics

5 0 0 5

This course is a study of fundamental statistical techniques, basic statistical distributions, measures of central tendency, statistical inference and sampling techniques. Prerequisite: MAT 003 or satisfactory score on mathematics placement test.

MAT 123 College Algebra

5 0 0 5

This course is designed as a precalculus covering the following topics: fundamentals of algebra, equations, and inequalities, functions and graphs, polynomial and rational functions, exponential and logarithmic functions, systems of equations. Prerequisite: MAT 004 or equivalent.

MAT 124 Trigonometry

5 0 0 5

This course is designed as a precalculus covering the following topics: algebraic preliminaries, the trigonometric functions, trigonometric identities and equations, applications of trigonometry, and analytic geometry. Prerequisite: MAT 123 or equivalent.

MAT 125 Analytic Geometry and Calculus I

5 0 0 5

This course is designed as an introduction to analytic geometry and calculus. Topics include the rectangular coordinate system, functions and graphs, limits, differentiation, applications of differentiation, and integration. Prerequisite: MAT 124 or equivalent.

MAT 126 Analytic Geometry and Calculus II

5 0 0 5

This course is a continuation of Analytic Geometry and Calculus I. Topics include trigonometric and exponential functions, techniques of integration, conic sections, and polar coordinates. Prerequisite: MAT 125 or equivalent.

MAT 127 Analytic Geometry and Calculus III

5 0 0 5

This course is a continuation of Analytic Geometry and Calculus II. Topics include infinite series, vectors, and surfaces. Prerequisite: MAT 126 or equivalent.

MAT 128 Analytic Geometry and Calculus IV

5 0 0 5

This course is a continuation of Analytic Geometry and Calculus III. Topics include

partial derivatives, multiple integrals, and differential equations. Prerequisite: MAT 127 or equivalent.

MAT 201 Technical Mathematics IV

5 0 0 5

This is a course in mathematics designed to support the electronics technology curriculum. Topics covered are advanced concepts of a differential and integral calculus, the Maclaurin series, series expansions, and differential equations and applications. Prerequisite: MAT 103.

MAT 1001 Mathematics for Masonry

5 0 0 5

This course provides instruction in basic mathematics including addition, subtraction, multiplication, division, decimals, percentages, and simple algebraic concepts. Measurement of length, area, volume, and weight will also be covered. Application to the masonry trade will be made throughout the course. Prerequisite: None.

MAT 1101 Fundamentals of Mathematics

5 0 0 5

This course will give the student practical number theory and analysis of the following basic operations: addition, subtraction, multiplication, division, fractions, decimals, powers and roots, percentages, ratio and proportion, plane and solid geometric figures used in industry, and measurement of surfaces and volumes. Prerequisite: None.

MAT 1102 Algebra

5 0 0 5

This course covers the following basic concepts and operations of algebra: historical background of our base-10 number system, algebraic operations (addition, subtraction, multiplication, and division), fractions, letter representation, grouping factoring, ratio and proportion, variations, graphical and algebraic solution of first-degree equations, solution of simultaneous equations by addition and subtraction, graphing, exponents, logarithms, tables, and interpolation. Prerequisite: None.

MAT 1103 Geometry

3 0 0 3

This course covers fundamental properties and definitions, plane and solid geometric figures, selected general theorems, and geometric construction of lines, angles, and plane figures. Also included are areas of plane figures, volume of solids, and geometric principles applied to shop operations. Prerequisite: None.

MAT 1104 Trigonometry

3 0 0 3

This course covers trigonometric ratios, solving problems with right triangles, using tables and interpolating, solution of oblique triangles using law of sines and law of cosines, graphs of the trigonometric functions, inverse functions, trigonometric equations, and all topics are applied to practical problems. Prerequisite: MAT 1102.

MAT 1114 Carpenter's Mathematics

5 0 0 5

This course includes practical problems which the carpenter must frequently solve

including the fundamental ideas in geometry, areas, triangles, circles and volumes of geometric solids and cylinders. Prerequisite: MAT 1101 or equivalent.

MAT 1115 Elements of Mathematics I **5 0 0 5**

A course designed for Electronic Servicing to include review of arithmetic, powers of ten, exponents, fundamentals of algebra, linear equations, fractions and applications. Prerequisite: None.

MAT 1116 Elements of Mathematics II **3 0 0 3**

A course designed for Electronic Servicing to include trigonometry, complex numbers, quadratic equations, logarithms and applications. Prerequisite: MAT 1115 or equivalent.

MAT 1150 Printer's Mathematics **5 0 0 5**

This course deals with the printer's point system as it applies to type spaces, furniture, and other spacing materials, as well as problems in spacing outlines and centering heads. Instruction and practice will be given in reading a micrometer. Problems in cutting paper economically, in figuring the amount, and in measuring the thickness of papers and offset plates will be used. Prerequisite: None.

MEC 101 Machine Processes I **1 0 6 3**

This is an introductory course designed to acquaint the student with basic hand tools, safety procedures, and machine processes in our modern industry. The course includes a study of measuring instruments, characteristics of metals, and cutting tools. The student will become familiar with the lathe family of the machine tools by performing selected operations such as turning, facing, threading, drilling, boring, and reaming. Prerequisite: None.

MEC 102 Machine Processes II **1 0 6 3**

This course covers advanced operations on lathe, drilling, boring, and reaming machines. The types of milling machines, cutter, jig, fixture devices, the accessories used in a modern industrial plant, and safety in the shop are also studied. Prerequisite: MEC 101.

MEC 104 Applied Mechanics **5 0 0 5**

This course covers the concepts and principles of statics, parallel, concurrent and noncurrent force systems in coplanar and noncoplanar situations, concepts of centroids and center of gravity, and moments of inertia. Prerequisites: MAT 103 and PHY 111.

MEC 180 Programming for Manufacturing **3 0 3 4**

This is a course in the planning, organizing, and execution of programs to improve manufacturing processes through the use of the microcomputer. Prerequisites: MEC 165 and MEC 201.

MEC 201 Manufacturing Processes I 1 0 6 3
The newer concepts of work handling, automatic machining processes, chipless production, new techniques in metal forming, analysis of high-energy forming, ultrasonic machining, electrolytic metal removal, chemical milling, numerical control system, and production methods in manufacturing are covered. Prerequisite: MEC 102.

MEC 202 Manufacturing Processes II 2 0 6 4
The newer concepts of work handling and automatic machining processes are emphasized. Concentrated study of production methods in manufacturing is included. Prerequisite: MEC 201.

MEC 203 Welding Processes 2 0 3 3
This is basic study of all popular welding processes, including basic gas welding, basic arc, MIG, TIG, automatic flame cutting, and process applications. Operation of each process is limited to the extent required. Prerequisite: None.

MEC 205 Strength of Materials 3 2 0 4
This course includes a study of principles and analysis of stresses which occur within machine and structure elements subjected to various types of loads such as static, impact, varying, and dynamic. An analysis of these stresses is made as applied to riveted and welded joints, beams, columns, and other components. Prerequisite: MEC 104.

MEC 206 Process Analysis and Estimating 3 4 0 5
This course focuses on the planning of operation sequences for efficient production, tool planning, and estimating. The operation of machine tools in production projects is required in laboratory exercises. Prerequisite: None.

MEC 210 Ferrous Metallurgy 3 0 3 4
This course is a beginning course in the field of metallurgy. The first quarter is concerned with the extraction, characteristics, and uses of ferrous metals. The student is given the opportunity to use basic metallurgical equipment during the laboratory part of the course. Prerequisite: PHY 112.

MEC 230 Hydraulics and Pneumatics 3 2 0 4
This is a course to introduce the student to the basic principles of hydraulics and pneumatics. General applications of fluid power systems will be studied, and the use of pneumatics in instrumentation and control will be covered. Prerequisites: PHY 111 and MAT 103.

MEC 235 Fluid Power 3 0 3 4
This course includes the basic theories of hydraulic and pneumatic systems; combinations of systems in various circuits; and the basic designs and functions of circuits and motors, controls, electrohydraulic servomechanisms, plumbing, filtration, accumulators, and reservoirs. Prerequisites: PHY 111 and MAT 103.

MEC 237 Control Systems**3 2 0 4**

This course covers the basic principles of electrical, electronic, and pneumatic control systems as related to industrial applications. The basic design and functions of circuits, motors, transducers, and servomechanisms, and a review of the National Electrical Code are included. Prerequisite: PHY 113.

MEC 240 Introduction to Robotics**3 2 0 4**

This is a fundamental course in application, programming, and maintenance of robot devices. Prerequisites: MEC 235, MEC 237, and MEC 180.

MEC 1101 Machine Shop Theory and Practice I**4 0 12 8**

This course provides an introduction to the machinist trade and the potential it holds for craftsmen. It deals primarily with the identification, care, and use of basic hand tools and precision measuring instruments. Elementary layout procedures and processes on the lathe drill press, grinding (off-hand) machines, and milling machines are introduced both in theory and practice. Prerequisite: None.

**MEC 1101A Machine Shop Theory &
Practice I (Part I)****2 0 6 4**

This is the first part of a two-part course that provides an introduction to the machinist trade and the potential it holds for craftsmen. It deals primarily with the identification, care, and use of basic hand tools and precision measuring instruments. Elementary layout procedures and processes on the lathe drill press, grinding (off-hand) machines, and milling machines are introduced both in theory and practice. Prerequisite: None.

**MEC 1101B Machine Shop Theory &
Practice I (Part II)****2 0 6 4**

This course is a continuation of MEC 1101A. Prerequisite: MEC 1101A.

**MEC 1102 Machine Shop Theory and
Practice II****4 0 12 8**

Instruction is provided on advanced operations using layout tools and procedures, power sawing, drill press, surface grinder, milling machine, and shaper. Students will be introduced to the basic operations of the cylindrical grinder and select projects encompassing all the operations, tools, and procedures thus far used and those to be stressed through the course. Prerequisite: MEC 1101.

**MEC 1102A Machine Shop Theory &
Practice II (Part I)****2 0 6 4**

This is the first part of a two-part course that includes instruction on advanced operations using layout tools and procedures, power sawing, drill press, surface grinder, milling machine, and shaper. Students will be introduced to the basic operations of the cylindrical grinder and select projects encompassing all the operations, tools, and procedures thus far used and those to be stressed through the course. Prerequisite: MEC 1101A & MEC 1101B.

**MEC 1103 Machine Shop Theory and
Practice III**

3 0 12 7

This course provides advanced work on the engine lathe; turning, boring, and threading machines; grinders; milling machine; and shaper. An introduction to basic indexing and terminology with additional processes on calculating, cutting, and measuring of spur, helical, worm gears, and wheels is provided. The use of precision tools and measuring instruments such as vernier height gages, protractors, and comparators is provided. Basic exercises are done on the turret lathe and on the tool and cutter grinder. Prerequisite: MEC 1102.

**MEC 1103A Machine Shop Theory &
Practice III (Part I)**

2 0 6 4

This is the first part of a two-part course that provides advanced work on the engine lathe; turning, boring, and threading machines; grinders; milling machine; and shaper. An introduction to basic indexing and terminology with additional processes on calculating, cutting, and measuring of spur, helical, worm gears, and wheels is provided. The use of precision tools and measuring instruments such as vernier height gages, protractors, and comparators is provided. Basic exercises are done on the turret lathe and on the tool and cutter grinder. Prerequisite: MEC 1102A & MEC 1102B.

**MEC 1103B Machine Shop Theory &
Practice III (Part II)**

1 0 6 3

This course is a continuation of MEC 1103A. Prerequisite: MEC 1103A.

**MEC 1104 Machine Shop Theory and
Practice IV**

3 0 12 7

Class projects using previously learned procedures in planning, blueprint reading, machine operations, final assembly, and inspection are developed. The instruction provides for additional processes on the turret lathe, tool and cutting grinder, cylindrical and surface grinder, and advanced milling machine operations. Special procedures and operations, processes and equipment, faithful observance of safety procedures, and establishment of good work habits and attitudes acceptable to the industry are stressed. Prerequisite: MEC 1103.

MEC 1112 Machine Shop Processes

1 0 3 2

This course acquaints the student with the procedures of layout work and the correct use of hand and machine tools. Experiences in the fundamentals of drill press and lathe operations, hand grinding of drill bits and the lathe tools, and set-up work applied to the trade are provided. Prerequisite: None.

MEC 1113 CNC Lathe Operation

1 0 3 2

This course is an introduction to CNC machining and the operation of the CNC Lathe. A study of “G” codes, program writing, loading programs into the machine, editing programs, and the running of programs on the CNC Lathe are also included.

Corequisite: MEC 1103 or equivalent machine shop experience. Prerequisite: MEC 1102 or equivalent machine shop experience.

MEC 1114 CNC Milling Machine Operation **1 0 3 2**

This course will cover an introduction to CNC machining, the operation of the CNC vertical mill, a study of “G” and “M” codes, program writing, loading programs into the vertical mill, editing programs, and the running of programs on the CNC vertical mill. Corequisite: MEC 1104 or equivalent machine shop experience. Prerequisite: MEC 1103 or equivalent machine shop experience.

MEC 1115 Metallurgy for Machinists **2 0 3 3**

This course provides an investigation into the properties of metals and tests to determine their uses. It includes the study of chemical, physical and mechanical properties of metals. Topics to be studied are identification of metals, extracting of metals from ores, classification of metals, heat treating of metals, and testing of metals. Prerequisite: None.

MEC 1117 Metallurgy for Welders **2 0 3 3**

This course is specifically designed to introduce the welding student to the science of metallurgy with the aim of providing an understanding of the effects of welding heat upon the metals being joined. An understanding of the proper heat treatments of both ferrous parts and nonferrous parts gives students insight into how heat affects the welding process. During this course, the welder is introduced to hardness testing, mechanical testing, mechanical and nondestructive testing of welds, and metallographic techniques including microscopic examination of the structures of metals. Prerequisite: None.

MEC 1120 Machine Processes **1 0 6 3**

This course is the study of practices used in metalworking shops and an introduction to how materials can be utilized. Demonstration of the metalworking lathes, drills, milling machines, shapers, and a study of the capabilities of these machines are also included. Prerequisite: None.

NMT 100 Introduction to Nuclear Medicine

Technology **1 2 3 3**

This course will provide the student with a comprehensive introduction to the field of nuclear medicine technology. The course will provide an overview of the school, program, profession, and history of the profession; examine the types of procedures performed in nuclear medicine, general patient care and radiation safety practices; familiarize the student with the clinical areas and provide the student with the opportunity to acquire some basic clinical skills. Prerequisite: None.

NMT 106 Nuclear Medicine Technology II **2 0 0 2**

This course will introduce students to their responsibilities as health care personnel. The emphasis of the course will be on various aspects of the student-patient

relationship. The course will also deal with other interpersonal relationships that the students will face as members of the health care team. Prerequisite: NMT 100.

NMT 107 Nuclear Medicine Technology III 2 2 0 3

This course will introduce the student to the instrumentation of nuclear medicine and the area of the radiopharmacy. The emphasis of the course will be on the practical aspects rather than the theoretical aspects. Prerequisite: NMT 106.

NMT 108 Nuclear Medicine Technology IV 3 0 0 3

This course deals with In Vivo nuclear medicine procedures. A cookbook type of format will be used to present all routine In Vivo procedures. Prerequisite: NMT 108.

NMT 111 Principles of Nuclear Medicine I 2 0 0 2

This course will deal with In Vivo nuclear medicine procedures. During the course, the students will examine studies pertaining to the central nervous system, pulmonary system, and gastrointestinal tract. Prerequisite: NMT 108.

NMT 116 Nuclear Physics 2 0 0 2

This course covers nuclear decay schemes and more complicated concepts of radioactive decay. Also discussed are interactions of radiation with matter and the calculations and measurement of radiation doses. Prerequisite: PHY 102.

NMT 117 Health Physics 2 0 0 2

During this course, students will study protective regulations, monitoring methods, techniques for reducing exposure of patients and technologists, and the Nuclear Regulatory Commission and N.C. Radiation Protection Program requirements. Prerequisite: None.

NMT 119 Introduction to Clinical Practice I 0 2 6 3

This is the first of a two-course series designed to introduce the student to the clinical practice of nuclear medicine technology. During the course, the student will be assigned to four clinical rotations. The student will assist the supervising technologist with the routine duties of each rotation. Prerequisite: NMT 100.

NMT 124 Introduction to Clinical Practice II 0 0 12 4

This is the second course in a two-course series designed to introduce the student to the clinical practice of nuclear medicine technology. During this course, the student will be assigned to six clinical rotations. The student will assist the supervising staff technologist with the routine duties of each rotation. Upon completion of this course, the student will have been exposed to all phases of the clinical practice. Prerequisite: NMT 100.

NMT 201 Clinical Practice 0 0 21 7

This is one of four courses designed to give the student an advanced understanding

of clinical practice. The student will have three rotations selected to provide an opportunity to experience various aspects of nuclear medicine technology. Prerequisites: NMT 100, NMT 119, NMT 124, and BIO 108.

NMT 202 Clinical Practice 0 0 21 7

This is one of four courses designed to give the student an advanced understanding of clinical practice. The student will have three rotations selected to provide an opportunity to experience various aspects of nuclear medicine technology. Prerequisites: NMT 100, NMT 119, NMT 124, NMT 201, and BIO 108.

NMT 203 Clinical Practice 0 0 21 7

This is one of four courses designed to give the student an advanced understanding of clinical practice. The student will have three rotations selected to provide an opportunity to experience various aspects of nuclear medicine technology. Prerequisites: NMT 100, NMT 119, NMT 124, NMT 202, and BIO 108.

NMT 204 Clinical Practice 0 0 21 7

This is one of four courses designed to give the student an advanced understanding of clinical practice. The student will have three rotations selected to provide an opportunity to experience various aspects of nuclear medicine technology. Prerequisites: NMT 100, NMT 119, NMT 124, NMT 203, and BIO 108.

NMT 213 Principles of Nuclear Pharmacy 3 0 0 3

Students will receive classroom instruction related to the operation of a nuclear pharmacy. Topics covered will include mathematics, radionuclide generators, radiopharmaceuticals, quality control of radiopharmaceuticals, and common nuclear pharmacy procedures. Prerequisite: None.

NMT 220 Instrumentation I 2 0 0 2

This course will provide the students with basic information about nuclear medicine instrumentation. The course will focus on the operation of components that are common to the majority of the instruments used in nuclear medicine. In addition to the common components, the course will also examine the operation and utilization of common auxiliary devices. Prerequisites: MAT 116 and PHY 102.

NMT 221 Principles of Nuclear Medicine II 2 0 0 2

This course will deal with In Vivo nuclear medicine procedures. During the course, the students will examine studies pertaining to the skeletal system, the cardiovascular system, and the thyroid gland. Prerequisite: NMT 108.

NMT 225 Computers in Nuclear Medicine 3 0 0 3

This course will provide the student with a general introduction to the operation of computers and the application of computers to the field of nuclear medicine. Prerequisite: NMT 107.

NMT 231 Principles of Nuclear Medicine III 2 0 0 2

This course deals with In Vivo nuclear medicine procedures. During the course, the students will examine the studies pertaining to the urinary system, In Vivo lab procedures, and therapy procedures. Prerequisite: NMT 108.

NMT 235 Instrumentation II 2 2 0 3

This course will develop the students' understanding of the use of nuclear counting statistics and the operation of nuclear medicine instruments. The primary focus of the course will be on theory of operation of gas detectors and sodium iodide scintillation detectors. In addition, the students will examine the operational characteristics, quality control procedures, and practical utilization of selected instruments. Prerequisite: NMT 220.

NMT 245 Instrumentation III 2 2 0 3

This is the last of three courses designed to develop the students' understanding of nuclear medicine instruments. The content of the course will include collimators, rectilinear scanners, gamma cameras, and computers. The primary focus of the course will be on theory of operation, operational characteristics, quality control procedures, and the practical utilization of the instruments covered. Prerequisite: NMT 220.

NMT 251 Principles of In Vitro Nuclear Medicine I 2 2 0 3

This is the first of two courses designed to develop the students' skills and knowledge in the area of In Vitro nuclear medicine. The focus of the course will be on laboratory skills, selected aspects of general chemistry, and selected aspects of biochemistry. Prerequisite: CHM 103.

NMT 258 Principles of In Vitro Nuclear Medicine II 2 2 0 3

This is the second course in a two-course series designed to develop the students' skills and knowledge in the area of In Vitro nuclear medicine. The primary focus of the course will be on the principles of competitive protein binding assays and the procedure for common assays. Prerequisite: NMT 251.

NMT 289 Radiobiology 2 0 0 2

This is a course in which the fundamentals of radiology, a system's sensitivity to radiation (normal and neoplastic), radiation pathology, and the biological effects of radiation are stressed. Emphasis is placed on the effects of radiation and the effects of radiation absorption on tissue and tissue recovery rate. Prerequisite: NMT 116.

NMT 290 Nuclear Medicine Technology Seminar 2 0 0 2

This course gives students an opportunity to review any aspects of nuclear technology in which they have special interest. Guest speakers will be invited to present papers on special topics. Prerequisites: NMT 201, NMT 202, NMT 203, and NMT 204.

NMT 292 Nuclear Medicine Technology Review**2 0 0 2**

This course will be a comprehensive review of the nuclear medicine program. The primary focus will be on routine procedures and information vital to a nuclear medicine technologist. The culmination of the course will be a comprehensive exam. Prerequisites: NMT 111, NMT 116, NMT 117, NMT 213, NMT 221, NMT 231, NMT 235 NMT 245, NMT 251, and NMT 289.

NMT 300 Clinical Practice Review**0 0 15 5**

During this course, the student will be assigned to six clinical rotations. The rotations will be chosen to strengthen demonstrated weaknesses of the student's previous clinical performance. Prerequisites: NMT 201, NMT 202, NMT 203, and NMT 204.

NUR 119 Pharmacology**2 2 0 3**

This course is designed to prepare the students for safe administration of medications. Emphasis is placed on the mathematics of drugs and solutions, methods of administration, and the general classification of pharmacological agents. Knowledge gained in pharmacology will be incorporated into the nursing process as it applies to nursing care. Corequisite: NUR 120.

NUR 120 Medical - Surgical Nursing I**4 2 6 7**

This course provides the student an orientation to the body systems approach to nursing care, the nursing process, and an orientation to the field of health/adaptation. Included are an exploration of the events which have influenced the practice of nursing, the role of the nurse, legal aspects, and the way in which the community provides health services. An introduction to the body systems method of study begins with study of the dermatological system. Planned clinical experience is designed to teach the student basic nursing skills and provide introductory experience. Emphasis is placed on providing care to meet some of people's basic needs. Theory and clinical practice introduce the psychosocial system as a major component of caring for the patient. Adaptation of patient and family to the process of dying is also introduced. Corequisite: NUR 119.

NUR 122 Medical - Surgical Nursing II**5 2 6 8**

This course emphasizes the use of the nursing process in the study of the musculoskeletal, hematological, and renal systems. It stresses assessment, intervention, and evaluation for patients with common problems of the musculoskeletal, hematological, special senses, or renal systems. Included is an introduction to oncologic nursing. Planned clinical experience will concentrate on giving basic physical care, administering medications, using basic communication techniques, understanding defense mechanisms, and implementing health teaching. Prerequisites: BIO 107, NUR 119, and NUR 120.

NUR 124 Medical - Surgical Nursing III**4 2 12 9**

This course allows the student to continue the body systems approach in utilizing

the nursing process to provide nursing care. Consideration will be given to people's basic needs and ability to adapt to a constantly changing environment. Areas of study in theory and in the clinical setting: care of the surgical patient and patients with gastrointestinal, biliary, liver, pancreatic, and fluid and electrolyte disorders. Prerequisites: BIO 108, NUR 122, and NUT 101.

NUR 126 Medical - Surgical Nursing IV **5 0 12 9**

This course allows the student to continue the body systems approach in utilizing the nursing process with special emphasis placed on endocrine, respiratory and cardiovascular disorders. Prerequisites: BIO 108, BIO 111, NUR 124, and NUT 101.

NUR 200 Nursing Seminar **3 0 0 3**

The purpose of this course is to help prepare students for the transition from student to graduate. Areas to be discussed include applying for a position, the phenomenon of reality shock, dealing with conflicts in the clinical area, ethical dilemmas facing the nurse, current issues in nursing, and the impact of the Nurse Practice Act on nursing practice. Information on completing the application for licensure will also be included. During the course, students will be encouraged to examine value systems in relation to current issues and ethical dilemmas, to explore alternate choices in given situations, and to share the rationale for their decisions. Prerequisites: NUR 224, NUR 225, NUR 226, and NUR 227.

NUR 224 Psychiatric Nursing **6 0 12 5**

This course is designed to provide a foundation of knowledge from which the student will identify elements of healthy behavior as well as maladaptive behaviors of the psychosocial system that are indicative of psychiatric disorders. Emphasis is placed on continued development of the student's therapeutic nurse interpersonal relationship as it is related to assisting the psychologically distressed person. The history, current treatment modalities, the role of the nurse, legal aspects, and psycho-dynamics of behavior disorders will be stressed. The student will be introduced to various techniques and skills utilized in assisting people with psychiatric disorders to improve their sense of well-being and restore their psychological equilibrium. Instruction in these areas will be implemented through the use of self-study, group activities, audiovisual aids, demonstrations in clinical practice, community resources, lectures, and process recordings. Prerequisites: BIO 111, BIO 112, NUR 126, NUT 101, PSY 110, and SOC 103.

NUR 225 Maternal/Newborn Nursing **6 0 12 5**

The complete maternity cycle will be presented with emphasis on family-centered care. Content will be offered in the physiological and psychosocial development throughout the childbearing experience, including infertility. This course will provide concepts regarding the roles of families and nurses in today's changing society. This course is also designed to give the students an opportunity to apply knowledge and skills gained in the study of the childbearing family. An opportunity

will be given for the student to utilize the nursing process in planning care for families during the childbearing process with attention to people's basic needs and adaptive behavior. Health promotion will be emphasized. Prerequisites: BIO 111, BIO 112, NUR 126, NUT 101, and PSY 110.

NUR 226 Nursing of Children

6 0 12 5

This course is designed to focus on the care of children with emphasis placed on the study of commonly seen disease conditions. The approach used in this area of study will allow the student to assimilate previously acquired knowledge of people, basic needs, and the nursing process. This knowledge will be applied to individualized nursing care of children in the clinical setting. The course begins with an exploration of current pediatric nursing trends in the health care of children and child care laws. Emphasis will be placed upon the nurse's role in meeting the needs of the well child according to the child's stage of growth and development as well as responding supportively to the child and family during periods of illness in the child's life. The preventive aspects of health promotion for children as well as the available community resources which focus on the needs of children will be discussed both in the classroom and clinical areas. Prerequisites: BIO 108, BIO 111, BIO 112, NUR 126, NUT 101, and PSY 110.

NUR 227 Nursing Care of the Older Adult

6 0 12 5

This course provides the student with the opportunity to utilize the nursing process in meeting the needs of the older adult in acute care, long-term care, and community settings. Special emphasis will be placed on the aging process as it applies to the body systems and developmental changes. Content will include pathological alterations commonly occurring in the older adult. Planned learning experiences will be designed to give the student contact with the older adult in a variety of situations. Prerequisites: BIO 108, BIO 111, BIO 112, NUR 126, NUT 101, and PSY 110.

NUR 228 Advanced Medical-Surgical Nursing I

4 0 18 10

This course provides the student an opportunity to integrate previously acquired knowledge of individual body system functioning and the nursing process and apply it to complex multisystem disorders. Emphasis will be placed on the designated multisystem disorders of shock, burns, and neurological dysfunctions. Prerequisites: BIO 108, BIO 111, BIO 112, NUR 224, NUR 225, NUR 226, NUR 227, and NUT 101.

NUR 229 Advanced Medical-Surgical Nursing II

4 0 18 5

This final course in medical-surgical nursing provides the students an opportunity to assimilate the previously acquired knowledge of people, body systems, the nursing process and health adaptation and to apply it to working with groups of patients. The area of focus deals with multisystem disorders. Planned learning experiences will also be designed to help the student manage care for groups of patients. Prerequisites: BIO 111, BIO 112, NUR 228, and NUT 101.

NUT 001 Basic Nutrition**3 0 0 0**

This course is the study of basic nutrition with emphasis on functions and sources of nutrients needed for a balanced daily diet, including an overview of basic food elements, digestion, absorption, and metabolism. Prerequisite: None.

NUT 101 General Nutrition and Diet Therapy**3 0 0 3**

This course introduces the basic principles of human nutrition and includes the major classes of nutrients and their utilization by the body. Factors affecting dietary habits, including fad diets, are presented. Nutritional requirements for various age groups are discussed. The applications and purpose of some common therapeutic diets and their relation to certain diseases are included in this course. Prerequisite: None.

ORI 101 Orientation**1 0 0 1**

This course acquaints the student with the college and its resources and provides techniques for academic survival. Topics will include interpersonal skills, learning skills, campus resources, and college mechanics. Prerequisite: None.

PED 101 Fitness for Life**0 0 3 1**

This course will be designed to explore and encourage positive health behavior through a program of good nutrition, stress management, and regular exercise. There will be a special focus on assessment of current fitness levels and the design of individual fitness programs. Prerequisite: None.

PED 102 Fitness and Recreation I**0 0 3 1**

This is a general physical education course aimed at improving and maintaining physical fitness. Activities include individual and group exercise and sports. Prerequisite: None.

PED 103 Fitness and Recreation II**0 0 3 1**

This is a general physical education course aimed at improving and maintaining physical fitness. Activities include individual and group exercise and sports. Prerequisite: None.

PHI 101 Introduction to Philosophy**5 0 0 5**

This is an introduction to general philosophy designed to familiarize the student with the main philosophical ideas of both Western and Eastern thought from ancient to modern times. Students are urged to examine major concepts and apply them to their own value systems. Prerequisite: None.

PHY 001 Pretechnical Physics**3 2 0 0**

This is a review of some of the basic concepts of physics. The topics included are systems of measurement, force and motion, and the properties of materials. Emphasis is placed on laboratory procedures and graphical analysis. Prerequisite: None.

PHY 100 Introduction to Physics 3 0 0 3

This course is an introduction to the problems and concepts of physics. The major areas covered are fundamental units and systems of measurements, motion, forces, momentum, work, energy, and power. Quantitative problems involve the use of elementary algebra and trigonometry. Prerequisite: None.

PHY 101 Concepts in Physics 3 0 0 3

This course is a nonmathematical introduction to problems and concepts of physics. The major areas covered are mechanics, properties of materials, heat, sound, light, electricity, and atomic theory. Emphasis will be on the association of physical principles with everyday phenomena. Prerequisite: None.

PHY 102 Electricity and Electronics 3 0 0 3

This is a study of electricity and electronics including the concepts of electric and magnetic fields, electric potential, electric circuits, and solid-state devices. Emphasis is on medical applications of electricity and electronics. Quantitative problems involve the use of elementary algebra and trigonometry. Prerequisites: MAT 113 and PHY 101 or PHY 100.

PHY 111 Physics - Mechanics 3 2 0 4

This is a fundamental course which develops the concepts of force, motion, work, energy, and power. Also included are the topics of vector analysis, rotational motion, and basic machines. Prerequisite: None. Corequisite: MAT 102.

PHY 112 Physics - Materials and Heat 3 2 0 4

This is a course which examines the properties of solids, liquids at rest and in motion, gas laws and their application, heat and thermodynamics. Emphasis is on practical application through the use of realistic problems and laboratory exercises. Prerequisite: PHY 111.

PHY 113 Physics - Electricity 3 2 0 4

This is a study of the basic principles of electricity including electron theory, direct current circuits, alternating current circuits, electromagnetic interactions, and batteries. Emphasis is on practical application through the study of electrical power generation, transmission, and conversion devices. Prerequisite: PHY 111.

PHY 114 Physics - Light and Sound 3 2 0 4

This is a study of wave motion and the generation, transmission, and detection of sound and light. Topics include acoustics, illumination, optical devices, and lasers. Practical application is emphasized through exercises and acoustical analysis of buildings and lighting system design and layout. Prerequisite: PHY 111.

PHY 150 Introduction to Astronomy 4 2 0 5

This study includes observation of the day and night sky by use of binoculars, telescopes, and other simple instruments; learning to observe and measure properties

of astronomical objects; and learning basic concepts of the solar system, stellar evolution, and cosmology. No science or math background will be required beyond the general requirements for the College Transfer program. Prerequisite: Admission to College Transfer program.

PHY 211 General Physics I with Calculus 4 2 0 5

This course is the first in a three-quarter sequence of calculus-based physics. Topics covered include linear and rotational kinematics and dynamics of particles. Newton's laws, work, energy, power, momentum and two-dimensional rigid body mechanics. Experimental verification of principles studied will form the basis of accompanying laboratory work. Prerequisite: MAT 125.

PHY 212 General Physics II with Calculus 4 2 0 5

This course is the second of the calculus-based physics sequence. Topics covered include properties of fluids and solids, wave motion and sound, temperature, heat, and thermodynamics. Verification of principles studied will form the basis of accompanying laboratory work. Prerequisite: PHY 211.

PHY 213 General Physics III with Calculus 4 2 0 5

This course is the third and final one in the sequence of calculus-based physics. Topics covered include magnetism and electromagnetism, alternating current, electromagnetic waves, geometrical optics, wave optics and atomic physics. Experimental verification of principles studied will form the basis of accompanying laboratory work. Prerequisite: PHY 212.

PHY 1101 Applied Science I 3 2 0 4

An introduction to some physical principles and their application in industry. Topics included are measurements in the English and metric system, properties of solids and liquids, work and simple machines, and basic electrical principles. A major emphasis is on basic electrical concepts and the operation of electrical devices. Practical application stressed by use of realistic problems and laboratory exercises. Prerequisite: None.

PHY 1102 Applied Science II 3 2 0 4

This course is a study of the concepts of force, motion, work, energy, power, and heat. Practical applications are realized through the study of friction and simple machines and the relationship between thermal and mechanical energy. Prerequisite: None.

PHY 1103 Fundamentals of Electricity 3 2 0 4

This course is a study of elementary principles of electricity including the structure of matter and electron theory, basic electrical units, and the relationship of current, voltage, resistance, and power in series, parallel, and combination circuits. Prerequisite: None.

PHY 1104 Applied Science IV**3 2 0 4**

This course is a study of wave motion and sound and light. Practical applications are stressed through the study of acoustics, musical sounds, color mixing, optical devices, illumination, and the laser. Prerequisite: None.

PHY 1114 Science for Printers**3 2 0 4**

This course is designed to acquaint the student with some of the facts and principles concerning the properties and structure of matter. Major topics considered will be the general and specific properties of matter, atomic theory, physical and chemical changes, theories of light, photometry, mirrors and lenses, reflection, refraction, and color. Prerequisite: MAT 1150.

PLU 1131 Plumbing I**8 0 15 13**

This course is an introduction to the plumbing trade. It includes plumbing systems, use and care of hand tools, and selection of plumbing materials. The student will learn to solder copper pipe, cement plastic pipe, and pour lead joints. Plumbing layouts and the study of the North Carolina Plumbing Code will also be introduced. Prerequisite: None.

PLU 1132 Plumbing II**3 0 15 8**

This course is a continuation of PLU 1131, Plumbing I. The student will practice "roughing-in" houses, which includes measuring for and cutting holes in stud walls; figuring proper slope in pipe; and locating stacks, stack vents, toilets, and drains. The student will also learn to determine the size of water and waste pipes and how to install them. The study of plumbing layouts and the North Carolina Plumbing Code will be continued. Prerequisite: PLU 1131.

PLU 1133 Plumbing III**5 0 18 11**

This course is a continuation of PLU 1132, Plumbing II. General plumbing practice will be continued. However, in this quarter the student will assist in the selection and installation of all types of fixtures as well as the selection, installation, and servicing of water heaters. The study of plumbing layouts and the North Carolina Plumbing Code will be continued. Prerequisite: PLU 1132.

PLU 1134 Plumbing IV**3 0 21 10**

This course is a continuation of PLU 1133, Plumbing III. The installation of plumbing will be continued. Additionally, the topics of plumbing repairs, troubleshooting, and unclogging drains will be covered. The study of layouts and plumbing codes will be concluded. Prerequisite: PLU 1133.

PNE 1103 Anatomy and Physiology**4 0 0 4**

This course is the study of the general plan of the body and the nine systems. It is designed to help the student understand how the human body controls its functions, stands erect and moves, distributes food and oxygen, removes waste, and provides for species survival. Each unit contains a section of medical terminology. Prerequisite: None.

PNE 1105 Drug Administration I**3 0 0 3**

This classroom course emphasizes safe techniques for drug administration. Basic arithmetic review, systems of measurement and practice in solving drug problems of measurement and conversion are included. Prerequisite: None.

PNE 1111 Drug Administration II**4 0 0 4**

Theory and practice are given in this classroom course on computing dosages of oral and parenteral drugs. The students role in drug administration is correlated with hospital policies. There is experience with equipment and techniques used in preparing and giving injections. Insulin therapy, medications for some common illnesses, and legal aspects of narcotic administration are studied. Prerequisites: PNE 1103, PNE 1105, and PNE 1301. Corequisite: PNE 1302.

PNE 1301 Fundamentals of Nursing**7 6 0 10**

This course introduces the student to the role of the practical nurse in the clinical setting. Classroom theory is coordinated with practice in lab or clinical assignments. Emphasis is placed on using the nursing process to safely meet patients' basic needs. Skills of communication, observation, organization, and documentation are taught at a beginning level. Purpose and principles of the following procedures are included: enemas, catheterizations, binders and bandages, application of heat and cold, medical and surgical asepsis and care of the patient during IV therapy. Prerequisite: None.

PNE 1302 Medical-Surgical Nursing I**9 0 15 14**

This course expands the knowledge of safe basic nursing care taught in Fundamentals of Nursing. Previously learned skills are related to specific needs of the following types of patients: geriatric, preoperative, and postoperative, the dying, those with cancer and those with disorders of the endocrine, circulatory and reproductive systems. Also included are principles of rehabilitation, general causes of and the body's response to disease, and an introduction to diagnostic tests. Clinical practice assignments are coordinated with classroom theory and provide the students with experience in using the nursing process in caring for adult patients. Emphasis is placed on performing nursing procedures, administering medications (except intravenous), communication and documentation. Prerequisites: PNE 1301, PNE 1103, PNE 1105, PSY 101, and NUT 101. Corequisite: PNE 1111.

PNE 1303 Maternal-Newborn Nursing (1/2 Qtr)**8 4 12 7**

This course presents the care of the maternal patient and the newborn. Physiological and common pathological changes and adaptations occurring during the maternal process and with the newborn as well as growth and development from conception through the newborn phase will be studied. Emphasis is placed on the importance of prenatal care in the prevention, detection, and treatment of conditions which affect maternal and/or neonatal health. Clinical practice assignments are coordinated with classroom theory and provide the student with experience in using the nursing process and adapting previously taught skills to care for the maternal and newborn patient. Prerequisite: PNE 1302.

PNE 1304 Child Health Nursing (1/2 Qtr)**8 4 12 7**

This course presents physical and psychosocial aspects of growth and development and the care of children from infancy through adolescence. Included is a study of congenital anomalies, common childhood diseases and communicable diseases. Clinical practice assignments are coordinated with classroom theory and provide the student with experience in using the nursing process to care for children with common health problems taught in the classroom. Emphasis is placed on communication with children and parents. Prerequisite: PNE 1302.

PNE 1305 Medical-Surgical Nursing II**9 0 15 14**

This course provides the student with a systems approach to the study of disorders of the following systems: respiratory, gastrointestinal and accessory organs, nervous, musculoskeletal, urinary and integumentary. Also included are common disorders of the eye, ear, blood and blood-forming organs. Clinical practice assignments are coordinated with classroom theory and provide the student with experience in using the nursing process in the care of adult patients. Emphasis is placed on preparation for the role of the graduate practical nurse by further development of previously taught skills. Prerequisites: PNE 1303, PNE 1304. Corequisite: PNE 1306.

PNE 1306 Nursing Seminar**3 0 0 3**

This course prepares the student for transition from student to graduate. Topics of discussion are career opportunities for the Licensed Practical Nurse, applying for and resigning a position, legal and ethical responsibilities, nursing organizations, leadership, continuing education trends and applying for licensure. Scope of practice for the Licensed Practical Nurse and other aspects of the Nurse Practice Act will be studied. Prerequisite: Must be a fourth-quarter student.

POL 102 National Government**5 0 0 5**

This course is a study of English and Colonial background, the Articles of Confederation and the framing of the federal Constitution; the nature of the federal union, states' rights, federal powers, and political parties; and the general organization and functioning of the national government. Prerequisite: None.

POL 103 State and Local Government**5 0 0 5**

This course is a study of American state and local governments, including inter-relationships of national, state and local levels; powers of executive, legislative and judicial branches; selection of officials; and budgeting. Special attention is given to North Carolina and Winston-Salem. Prerequisite: None.

POL 212 American Government**3 0 0 3**

This course will survey the organization and functions of our national and state government with special emphasis upon the study of the national Constitution. Prerequisite: None.

PRN 1131 Introduction to Printing**6 0 12 10**

This course is an introduction to the printing trade. Instruction will include student orientation, a historical outline of graphic arts, familiarization of terms, equipment, and tools used in printing, and demonstrations of the equipment used in graphic arts. The student will be required to produce a printing project. Safe practices and safety rules are stressed. Prerequisite: None.

PRN 1132 Offset Printing I**4 0 12 8**

This course is an introduction to offset printing. The operation of short-coupled, integrated dampening duplicators and long-coupled, register table duplicators will be covered. The student will be required to operate each of these pieces of equipment. Prerequisites: MAT 1150 and PRN 1131.

PRN 1133 Offset Printing II**6 0 15 11**

A continuation of PRN 1132, Offset Printing I, this course will place emphasis on the use and maintenance of the larger press. Students will be introduced to the production of two-, three-, and four-color printing. This course is also an advanced study of the process camera and related darkroom equipment. Prerequisites: PHY 1114, PRN 1132, and PRN 1134.

PRN 1134 Composition I**3 0 6 5**

The students will be instructed in the methods of copy preparation and the use of equipment in that phase of graphic arts. Desktop publishing will be introduced in a new computer format. After the students learn how to prepare the copy, they will be required to produce one or more jobs. Prerequisites: MAT 1150, EDP 1101, and PRN 1131.

PRN 1135 Composition II**3 0 3 4**

This course is a continuation of PRN 1134, Composition I. The major part of this course will be devoted to cold type and art composition by the digitized method. Machines covered will include the computer, laser printer, and headliner. Prerequisites: PHY 1114, PRN 1132, and PRN 1134.

PRN 1136 Estimating**5 0 0 5**

This course covers fundamentals of estimating costs of printing. Included in the instruction are the role of the estimator, basic cost areas, paper and layouts, preparatory composition, the press, finishing, estimate forms, estimating practice, and use of the Franklin Catalog. Prerequisites: PRN 1133 and PRN 1135.

PRN 1137 Printing Project**0 0 21 7**

The printing project will be determined after a conference between the instructor and student. The project will be in an area in which the student has had the fundamentals. Prerequisites: PRN 1133 and PRN 1135.

PSM 100 Postal Service History and Organization**3 0 0 3**

This course is designed to trace the delivery of written communication and

merchandise from earlier eras to the present. It compares the private, corporate, and governmental agencies which have been responsible for mail service throughout the world, but particularly in the United States. The current postal organization as mandated by public law 91-37B is studied. Postal philosophies, policies, procedures, rules and regulations are also studied and traced to the current organization. Prerequisite: None.

PSM 101 Postal Service Labor Management

5 0 0 5

The course presents an overview of laws and practices as related to Labor-Management in the Postal Service. It starts with the development of labor unions in the federal government and reviews the current status, problems, and/or issues in the Postal Service. Emphasis is placed on the National and Local Agreements, the various bargaining units and associations in the U. S. Postal Service, grievance procedures, disciplinary action procedures, and the National Labor Relations Board. Prerequisite: None.

PSY 101 Psychology

3 0 0 3

This course is geared to study the principles of human behavior with reference to thinking, learning, memory, perception, emotional life, individual differences in intelligence, aptitude, personality, the scientific nature of psychological investigations, and research findings related to daily life. Prerequisite: None.

PSY 102 General Psychology

5 0 0 5

This course is a study of the various fields of psychology: the developmental process, motivation, emotion, frustration and adjustment, mental health, attention and perception, and problems of group living. Attention is given to applications of these topics to problems of study, self-understanding, and adjustment to demands of society. Prerequisite: None.

PSY 108 Abnormal Psychology

5 0 0 5

This course offers an introduction to behavior pathology. The etiology, diagnosis, and prognosis of abnormal behavior, neurosis, psychosis, character disorders, and psychosomatic reactions are among the topics included in the study. Prerequisite: PSY 101 or PSY 102.

PSY 110 Lifespan Psychology

3 0 0 3

This course will deal with the human life span from conception through old age. It is intended to give the student a thorough grounding in the basic principles of developmental psychology. Emphasis will be placed on the theories of Ericson, Piaget and Havighurst. Physiological and psychological critical periods in the development of the individual will be identified and their implications explored. Special attention will be given to the stress periods of childhood, adolescence, middle age, and old age. Prerequisite: PSY 101 or permission of the instructor.

PSY 111 Abnormal Behavior

3 0 0 3

This course offers an introduction to behavior pathology. Students will be given a

basic grounding in the etiology, diagnosis, and prognosis of various kinds of abnormal behavior. Topics in the study will include neurosis, psychosis, addiction, suicide, character disorders, psychosomatic reactions, childhood disorders, and geriatric disabilities. Prerequisite: PSY 101 or PSY 102.

PSY 112 Personality Development

3 0 0 3

This course is designed to help the student recognize the importance of the physical, intellectual, social, and emotional dimensions of personality. Grooming and methods of personality development are emphasized. Prerequisite: None.

PSY 115 The Psychology of Helping Relationships

3 0 0 3

This course is designed to help the student develop an awareness of attending skills including perception, self-concept, interpersonal communication and an understanding of the importance of these skills and their use in providing support and comfort in human relationships. Prerequisite: Enrollment in health curriculum or permission of department chairperson.

PSY 205 Child Psychology

3 0 0 3

The objective of this course is to consider the significant phases of motor, cognitive, emotional, and social development of the child as these are influenced by genetic, cultural, and individual elements from the prenatal period to adolescence. Prerequisite: PSY 101 or PSY 102.

PSY 206 Applied Psychology

3 0 0 3

This is a study of the principles of psychology that will be of assistance in the understanding of interpersonal relationships on the job. Motivation, feelings, and emotions are considered with particular reference to on-the-job problems. Other topics investigated are employee selection, supervision, job satisfaction, and industrial conflicts. Attention is also given to personal and group dynamics so that the student may learn to apply the principles of mental hygiene to adjustment problems as a worker and as a member of the general community. Prerequisite: None.

PSY 241F Grief Psychology

5 0 0 5

This course presents the role of the funeral director in grief counseling. Emphasis is placed on making the funeral director more aware of the psychological needs the impact of death creates in the bereaved. Upon completion, students will be able to apply the concepts of death, dying, immortality, grief, bereavement, religion, and the funeral in a funeral services vocation. Prerequisite: PSY 101.

PSY 1101 Human Relations

3 0 0 3

This course is a development of understanding of relationships to other persons through some of the basic principles of human psychology. Study of the problems of the individual and the work situation in relation to society, group membership, and relationships within the work situation are included. Prerequisite: None.

RDT 112 Introduction to Patient Care Techniques 2 0 0 2

Considerations for study include the patient care responsibilities of the radiographer, principles of body mechanics and effective patient-technologist communication. Radiographer reaction to acute patient care situations is also discussed. Prerequisite: None.

RDT 113 Departmental Orientation and Medical

Ethics and Law 2 2 0 3

Students will be introduced to the operational aspects of the radiology department through both classroom and clinical experience. Emphasis for study includes basics of radiation protection and insights into medical ethics and law needed by the technologist. Prerequisite: None.

RDT 114 Basic Essentials of Radiologic

Technology 3 2 15 9

The student is introduced to the basic essentials of Radiologic Technology. Included is a preliminary overview of radiographic and fluoroscopic equipment and the principles of automatic processing. Basic technical factors and radiographic accessories are discussed with emphasis placed on their effect on equipment utilization and operation. The student uses the clinical hours to fortify these basic essentials. Prerequisites: RDT 112 and RDT 113.

RDT 120 Radiation Physics 4 0 0 4

The basic principles behind atomic theory, magnetism, electricity, radioactivity and x-ray circuitry as related to the radiologic sciences are presented. Prerequisite: RDT 114.

RDT 130 Radiation Biology and Protection 3 0 0 3

The effects of radiation on the individual cell, organ systems, and the body as a whole are explored. Protective regulations, monitoring devices and reporting procedures for radiation exposure to patient and worker are presented. The effects of radiation and their link to medical use of radiation protection measures are stressed. Prerequisite: RDT 120.

RDT 137 Radiographic Technique I 3 2 0 4

This course introduces the student to the basic concepts of radiographic production. Laboratory experiences provide the student with opportunities to test the principles of radiographic exposure and usage of accessory equipment. Prerequisite: RDT 114.

RDT 138 Practicum I 0 2 15 6

Clinical and energized lab experience is utilized with special emphasis on positioning, technique and accessories used in radiography of the upper extremities, chest and abdomen. Prerequisite: RDT 114.

RDT 139 Positioning and Related Anatomy I 3 0 0 3

This course will deal with radiographic positioning of the upper extremity, shoulder girdle, foot, ankle, and lower leg. Special emphasis is placed upon the osseous radiographic anatomy of the particular structure. Prerequisites: BIO 108, BIO 115, and BIO 116.

RDT 148 Practicum II 0 2 15 6

Clinical and energized laboratory experience is utilized with special emphasis placed on positioning, technique and accessories needed in radiography of the knee, femur, hip and pelvic girdle. Prerequisite: RDT 138.

RDT 149 Positioning and Related Anatomy II 3 0 0 3

This course includes radiographic positioning of the proximal lower extremity and the entire vertebral column. Special attention is given to bony anatomy of the areas studied. Prerequisite: RDT 139.

RDT 233 Seminar 2 0 0 2

Current advancements in technology in the field are identified and discussed. Students will select a topic for research and presentation. Prerequisite: None.

RDT 237 Radiographic Technique II 3 0 0 3

An in-depth study is presented in the selection of exposure factors and the proper use of grids, cones, and other devices which may be employed to produce high quality radiographs. Prerequisite: RDT 137.

RDT 248 Practicum III 0 2 21 8

Clinical and energized laboratory experience concentrates on positioning, technique and accessories used in radiography of the vertebral column. Prerequisite: RDT 148.

RDT 250 Special Procedures I 3 0 0 3

This course provides in-depth study into radiographic procedures requiring special imaging or approach techniques to areas previously difficult to visualize. Representative procedures include conventional body section radiography, computed tomography, stereoradiography and special contrast media studies of the organ systems of the head, chest, and abdomen. Cross sectional anatomy is studied to reinforce computer-assisted imaging techniques. Prerequisite: BIO 108.

RDT 252 Special Procedures II 3 0 0 3

Emphasis for study consists of angiographic procedures for demonstration of the vascular structures of the cranium, trunk and extremities. Introduction is provided to the imaging technologies to include medical sonography, magnetic resonance imaging and digital radiography. Prerequisite: RDT 250.

RDT 254 Departmental Administration and**Quality Assurance****3 0 0 3**

This course analyzes the operational aspects of a radiology department to include finances, employee supervision, scheduling and other special problems. Organization and implementation of a departmental quality control program are discussed. Prerequisite: None.

RDT 258 Practicum IV**0 2 21 8**

Radiographic positioning of the cranium as a whole and paranasal sinuses is stressed through clinical and laboratory experience. Emphasis is placed on technique and accessory equipment selection. Prerequisite: RDT 248.

RDT 261 Pediatric, Emergency and Operative**Radiography****2 0 0 2**

Procedures utilized in radiography of pediatric, operative and emergency radiographic examinations are examined. Discussion of positioning, technical factor selection and special care needed during these exams is pursued. Prerequisite: RDT 137.

RDT 268 Practicum V**0 2 21 8**

Clinical and energized laboratory experiences emphasize positioning technique and accessories used in radiography of the individual bony segments of the cranium. Prerequisite: RDT 258.

RDT 269 Positioning and Related Anatomy III**3 0 0 3**

This course investigates anatomy and radiographic positioning of the gastrointestinal, biliary and urinary systems. Applications for radiographic equipment and accessories are presented. Prerequisite: RDT 149.

RDT 278 Practicum VI**0 2 21 8**

Clinical and energized laboratory experience stresses refinement of positioning and technique skills in special and routine radiographic studies. Emphasis is placed on emergency radiography. Prerequisite: RDT 268.

RDT 279 Positioning and Related Anatomy IV**3 0 0 3**

The basics of bony skull anatomy, positioning of the cranium and application for equipment/accessories needed for cranial radiography are studied. Specialized filming techniques of the paranasal sinuses, facial bones, centers of hearing and mandible are included. Prerequisite: RDT 269.

RDT 283 Radiographic Pathology**2 0 0 2**

Pathological conditions which can be demonstrated radiographically are discussed as to their appearance on the radiograph. Focus for study is procedures and techniques the technologist can utilize to best demonstrate pathologies present. Prerequisite: None.

RDT 289 Film Critique I**2 0 0 2**

This first in a series of four film critique courses, this course introduces the basics of film quality analysis. Students present radiographs of the upper and lower extremity, chest and abdomen for evaluation. Prerequisites: RDT 138 and RDT 139.

RDT 290 Film Critique II**2 0 0 2**

Study emphasizes quality analysis of radiographs performed of the vertebral column. The adequacy of technical factors, part demonstration and overall diagnostic value are considered. Prerequisite: RDT 289.

RDT 291 Film Critique III**2 0 0 2**

This course deals with the critical analysis of radiographs of the cranium. Recognition of correct alignment and demonstration of skull anatomy are stressed. Prerequisite: RDT 290.

RDT 292 Film Critique IV**2 0 0 2**

Radiographs from special radiographic procedures are assessed as to their adequacy of part positioning, anatomy visualized and technical quality. Representative special studies for consideration include xeromammography, contrast media exams, body section radiographs and operative procedures. Prerequisite: RDT 291.

RDT 301 Current Issues in Radiology Mgmt.**1 0 0 1**

Changes and innovations in staffing methods, imaging techniques, effective management by goal setting and objectives, and governmental radiation regulations will be presented for discussion. Legal aspects of technology and the growing accountability of the technologist will be considered. Emphasis will be placed on the application and long term results of implementation of current trends in departmental operations. Prerequisite: Enrollment in seventh quarter RDT Curriculum or graduate of an AMA approved RDT program or permission of the RDT department chairperson.

**RDT 302 Effective Communication: Technologist,
Patient and the Health Team****1 0 0 1**

The role of the technologist in the health team will be examined. Communication skills necessary for effective communication, both oral and written, will be identified. Communication mechanisms needed for the exceptional patient will be explored through role play and discussion. Prerequisite: Enrollment in seventh quarter RDT Curriculum or graduate of an AMA approved RDT program or permission of the RDT department chairperson.

**RDT 303 Technologist Motivation in the
Radiology Setting****1 0 0 1**

The various ideologies of motivation will be discussed. Effective motivators for technologists possible in the clinical setting will be identified. Also to be considered

is the use of an employee appraisal system as a motivator for technologist behavior. Prerequisite: Enrollment in seventh quarter RDT Curriculum or graduate of an AMA approved RDT program or permission of the RDT department chairperson.

**RDT 304 Preparation for the National
Radiologic Technology Boards**

1 0 0 1

The content specifications for the national examination in Radiography are the basis for this overview study of varied test topics. Test taking skills are applied in sample test items to improve the test taker's performance. Prerequisite: Enrollment in seventh quarter RDT Curriculum or graduate of an AMA approved RDT program or permission of the RDT department chairperson.

**REA 100 Introduction to Real Estate
Appraisal (R-1)**

3 0 0 3

This course introduces the student to the subject of real estate appraisal and prepares the student for the R-2 course on "Valuation Principles and Procedures". It begins with coverage of basic real property law, followed by coverage of the various concepts of value and the operation of real estate markets. Relevant mathematical concepts are then reviewed and the student is introduced to statistical concepts used in appraisal practice. Next comes coverage of real estate financing terminology and practices, followed by an introduction to the basics of residential construction and design. The student is then provided an overview of the entire valuation (appraisal) process, and the course concludes with specific coverage of residential neighborhood analysis and property analysis, two of the most important preliminary steps in the appraisal process. Prerequisite: None.

**REA 101 Valuation Principles and
Procedures (R-2)**

3 0 0 3

This course focuses on the procedures (methodology) used to develop an estimate of property value and how the various principles of value relate to the application of such procedures. Emphasis is on appraisal of residential 1-4 unit properties and small farms; however, all the concepts and procedures covered are applicable to the appraisal of all types of properties. The course begins with a review of the appraisal process and proceeds into thorough coverage of the sales comparison approach, followed by site valuation methods used to appraise residential 1-4 unit properties. The cost approach is then covered in depth. The basic concepts and methodology associated with the income approach are covered, with emphasis on direct capitalization using an overall rate and the gross rent multiplier technique. Finally, the student is introduced to the process of reconciling property value estimates obtained through application of the approaches to value. Prerequisite: REA 100.

**REA 102 Applied Residential Property
Valuation (R-3)**

3 0 0 3

This course covers laws, rules, and standards which must be followed by appraisers and focuses on the application of principles and procedures to the appraisal of

residential 1-4 unit properties and small farms. The student is first acquainted with federal laws/regulations applicable to appraisers and the provisions of the North Carolina Real Estate Appraisers Act and related Commission Rules. Next comes coverage of the Uniform Standards of Professional Appraisal Practice (which are part of the Commission's Rules), followed by coverage of appraisal reports, with emphasis on standard report forms. The student then participates in a comprehensive case study of an appraisal of a single-family house using the URAR form. Instruction is then provided on various special considerations in appraising other types of residential 1-4 unit properties and in appraising farms. Finally, the student is introduced to appraising special (partial) property interests and to condemnation appraisals. Prerequisites: REA 100 and REA 101.

REA 200 Introduction to Income Property

Appraisal (G-1)

3 0 0 3

This course introduces concepts and techniques used to appraise real estate income properties. It begins with a discussion of underlying economic principles and motivations for investing in income property. The appraisal process is then reviewed with emphasis on income property. This is followed by a discussion of real estate market analysis, property analysis, and site valuation. Mathematical and statistical concepts used in the appraisal of income property are covered next followed by coverage of how to use financial tables and/or financial calculators to solve a variety of problems associated with analysis of real estate income properties, including present value, loan calculations, estimation of net operating income, and estimation of before tax cash flow. Next, students learn how to estimate the value of a real estate income property by using a gross income multiplier and by direct capitalization with an overall rate. Finally, students are introduced to other capitalization rates. Prerequisites: REA 100, REA 101, and REA 102.

REA 201 Advanced Income Capitalization

Procedures (G-2)

3 0 0 3

This course reviews and then expands on the concepts introduced in Course G-1. The direct capitalization techniques introduced in G-1 are expanded to include various band of investment and residual techniques used in income property appraisal. This is followed by a thorough discussion of the concepts of yield rates and of discounted cash flow analysis (yield capitalization), which is the primary focus of this course. Financial leverage is also discussed so students better understand the relationship between various yield rates and capitalization rates. Several traditional yield capitalization formulas including Inwood, Hoskold, Ellwood and Akerson, are then discussed. Although rendered obsolete by the advent of financial calculators, these formulas are still used by many appraisers and students should be familiar with them. A financial calculator is required for this course. Prerequisite: REA 200.

REA 202 Applied Income Property

Valuation (G-3)

3 0 0 3

This course covers laws, rules, and standards which must be followed by appraisers

and focuses on the application of principles and practices to the appraisal of income properties. The course begins with a review of federal laws/regulations applicable to appraisers, followed by coverage of the North Carolina Real Estate Appraisers Act and related Commission Rules, and coverage of the Uniform Standards of Professional Appraisal Practice (which are part of the Commission's Rules). Preparation of narrative appraisal reports is then covered, with students also being introduced to the Uniform Commercial and Industrial Appraisal Report (UCIAR) form. Coverage then shifts to appraising leased income properties, with emphasis on the effect of various lease provisions on the value estimate. The student then participates in highest and best use case studies, followed by case studies of appraisals of various types of existing income properties, which is the major focus of the course. The course concludes by covering considerations in appraising various development projects. Prerequisites: REA 200 and REA 201.

RTH 109 Respiratory Care I **0 6 0 3**

This course will provide the student with a general orientation of the hospital setting and the respiratory care profession. The student will learn the following basic patient care procedures and skills: patient monitoring, infection control, patient positioning, body mechanics, medical-legal aspects and patient charting. Prerequisite: None.

RTH 111 Clinical Experience I **0 2 6 3**

The student will assist respiratory care personnel in the utilization of various types of basic respiratory care equipment and patient monitoring techniques. Emphasis will be placed on support of subject matter covered in RTH 119. Prerequisites: BUS 141 and RTH 109.

RTH 112 Clinical Experience II **0 2 12 5**

The student will perform chest physiotherapy procedures, patient assessment techniques, oxygen and humidity/aerosol therapy, and procedures to aid lung inflation. Students will also rotate through hospital decontamination areas. Prerequisites: RTH 111, RTH 119, and RTH 140.

RTH 113 Clinical Experience III **0 2 12 5**

This course will provide the student clinical rotations involving procedures from previous and parallel respiratory care courses. An introduction rotation in emergency and critical respiratory care will also be conducted. Prerequisite: RTH 112.

RTH 119 Respiratory Care II **1 2 0 2**

This course will provide the student with knowledge of gas physics, physical and chemical properties and changes of matter. Emphasis will be placed on the technical aspects of basic respiratory care equipment. The student will use clinical hours to support equipment and concepts learned in this course. Prerequisite: RTH 109.

RTH 129 Respiratory Care III **1 2 0 2**

This course will focus on airway management, aids to lung inflation, manual

resuscitators, oxygen analyzers, equipment decontamination and bedside monitoring equipment and techniques. Prerequisite: RTH 119.

RTH 139 Cardiopulmonary Anatomy & Physiology **4 0 0 4**

This course consists of a concentrated study of anatomy and physiology of the respiratory, cardiovascular, and renal systems. Emphasis will be placed on applications in respiratory care. Prerequisites: BIO 108 and MAT 114.

RTH 140 Chest Physiotherapy **1 0 0 1**

This course through lecture and demonstration deals with chest physiotherapy procedures, including postural drainage, chest percussion and vibration, and rib springing. These procedures will be discussed and practiced in the clinical environment. Prerequisite: RTH 109.

RTH 150 Pharmacology **3 0 0 3**

This course, through lectures and demonstrations, will provide the student with a working knowledge of pharmacological effects, side effects, contraindications, and use of the major classes of drugs. Special emphasis will be placed upon those drugs affecting the respiratory system and the autonomic nervous system. Prerequisites: BIO 108 and MAT 114.

RTH 160 Topics in General and Cardiopulmonary Surgery **1 0 0 1**

This course is a lecture series on the various general and cardiopulmonary surgeries. Emphasis will be on the general principles of anesthesia and pre- and postoperative respiratory care. Prerequisites: RTH 139 and BIO 169.

RTH 170 ECG and Hemodynamic Monitoring **1 2 0 2**

This course is designed to provide the student with a knowledge of the electrocardiogram (ECG) and cardio-hemodynamic monitoring techniques. Emphasis will be placed on dysrhythmia recognition, hemodynamic monitoring techniques, performing the 12-lead ECG, arterial-line insertion, and arterial blood procurement techniques. Prerequisite: RTH 139.

RTH 180 Cardiopulmonary Diseases **5 0 0 5**

The etiology, classification, diagnosis, progression, treatment, and prognosis of the most frequently encountered pulmonary diseases will be discussed. Prerequisites: RTH 129, RTH 139 and BIO 169.

RTH 211 Neonatal and Pediatric Respiratory Care **3 2 0 4**

Normal growth and development and anatomy and physiology of the newborn through pediatric age groups will be discussed. Disease process of the neonate and pediatric patient will be covered. Mechanical ventilation and critical care of these patients will be discussed in depth. Prerequisites: BIO 169, RTH 215, and RTH 250.

RTH 215 Ventilators 2 2 0 3

The technical aspects of ventilator care will be taught. Emphasis will be placed on maintenance, assembly, and operation of the machines used. Prerequisite: None.

RTH 218 Clinical Experience IV 0 2 12 5

This course is designed to give the student the opportunity to perform and demonstrate knowledge gained in previous and parallel courses. Emphasis will be given to providing respiratory care in the critical care setting and will include management of the mechanically ventilated patient, hemodynamic monitoring and advanced airway management techniques. Prerequisites: RTH 113 and RTH 170.

RTH 228 Clinical Experience V 0 2 12 5

The student will begin clinical rotations in neonatal and pediatric respiratory care and continue with adult critical care rotations. Emphasis will be placed on rotations in the cardiopulmonary lab. Prerequisites: RTH 215, RTH 218, RTH 250, and RTH 268.

RTH 238 Clinical Experience VI 0 0 15 5

The student will gain clinical exposure in parallel respiratory care courses. Emphasis will be placed on neonatal and pediatric intensive care and the trauma patient. Prerequisites: RTH 211 and RTH 228.

RTH 240 Cardiopulmonary Rehabilitation and Home Care 1 0 0 1

This course is designed to provide the student with a working knowledge of the pulmonary and cardiovascular systems in relationship to cardiopulmonary rehabilitation of the pulmonary patient. Emphasis is also placed on the home care of the pulmonary patient. Prerequisite: RTH 238.

RTH 241 Respiratory Care Department Operations 1 0 0 1

The student will work independently and as a team member in a theoretical respiratory care department. Budget planning, space requirements, equipment purchase decisions, changes, and personnel management will be discussed. Prerequisite: RTH 238.

RTH 248 Clinical Experience VII 0 0 30 10

The student will gain further clinical experience through various rotations in the hospital and home care settings. Emphasis will be placed on rotations in respiratory care departmental operations and cardiopulmonary home care. Prerequisite: RTH 238.

RTH 250 Intensive Respiratory Care 3 0 0 3

This course will cover various topics related to the respiratory care of the critically ill adult patient. Emphasis will be placed on management of the patient-ventilator system, advanced airway management, and medical/surgical problems common in the critical care environment. Prerequisites: RTH 170, RTH 180, and NUT 101.

RTH 255 Seminar 1 0 0 1

This course will focus on advances in technology and cross-training within the respiratory care profession. Students will perform current research and present projects in class. Prerequisite: RTH 228.

RTH 260 Trauma Care 2 0 0 2

This course will present major topics of trauma care and will focus on the role of the respiratory therapist in trauma management. Prerequisite: RTH 228.

RTH 268 Cardiopulmonary Diagnostic Testing 1 2 0 2

This course is designed to provide the respiratory care student with a comprehensive knowledge of diagnostic studies of the respiratory and cardiovascular system. Technical theory, manual calculation, equipment and interpretations of each diagnostic test will be presented. Prerequisites: RTH 170 and RTH 180.

RTT 130 Radiographic Imaging I 0 2 12 5

Through clinical experience and laboratory exercises, this course concentrates on the operation of routine radiographic equipment; part positioning of the chest, abdomen and body extremities; and patient care techniques. Selection of radiographic exposure factors and the use of equipment accessories are also stressed. Prerequisite: RDT 114.

**RTT 131 Radiation Therapy Positioning
and Anatomy** 4 0 0 4

Anatomy and routine projections of the vertebral column and cranium are discussed. Radiation therapy simulation is introduced with terminology, equipment, and accessories. Prerequisite: BIO 108 and RDT 139.

RTT 132 Radiographic Imaging II 0 2 12 5

Clinical and laboratory experiences move to the radiation therapy department with emphasis on simulation, procedure, equipment, terminology, and accessories. Prerequisite: RTT 130.

RTT 205 Radiation Therapy Physics I 3 0 0 3

Fundamental principles, concepts and terminology concerning the atom and the structure of matter are explored. The properties and basis for production of ionizing radiation are presented as applicable to radiation therapy. Prerequisites: BIO 108 and RTT 131.

RTT 206 Radiation Therapy Physics II 3 2 0 4

The means for production of gamma and x-radiation are studied. Measures of radiation quantity and treatment units are applied through laboratory sessions. Topics for discussion and laboratory sessions will include photon interactions and radioactivity. Prerequisite: RTT 205.

RTT 207 Dosimetry I 3 4 0 5

Classroom and laboratory sessions present the basic concepts of clinical dosimetry and treatment planning. Delivery methods to include single and multiple beam techniques are discussed. Tumor localization and dose calculations are performed. Prerequisites: MAT 101 and RTT 227.

RTT 208 Dosimetry II 3 4 0 5

Consideration of more complex dosimetry and treatment planning directs students' experiences from manual to computer-performed calculations. The means for construction and application of treatment accessories are outlined. Prerequisite: RTT 207.

RTT 214 Orientation to Radiation Therapy 3 2 12 8

This course introduces the students to the operation of the radiation therapy department, the role of the radiation therapy technologist, selected equipment, and patient care particular to the clinical setting. Basic procedures are observed through clinical and laboratory experience. Prerequisite: RTT 132.

RTT 215 Radiobiology 3 0 0 3

Course studies center on the biological effects of ionizing radiation, tissue sensitivity, and tissue response to irradiation. Methods of radiation protection applicable to tumor localization and treatment delivery are emphasized. Prerequisite: RTT 205. Corequisite: RTT 206.

RTT 221 Clinical Oncology I 3 0 0 3

The first of a two-course series, this course promotes the study of malignant disease within anatomical systems. Staging and grading, etiology, spread and involvement of selected tumor types are outlined for discussion and possible implications in treatment delivery. Prerequisites: BIO 108 and RTT 131.

RTT 222 Clinical Oncology II 3 0 0 3

The study of malignant disease is continued from Clinical Oncology I to include disease processes of the various body systems. Methods of treatment significant to tumor type and location are discussed. Patient prognosis is examined to better understand the goals of radiation therapy. Prerequisite: RTT 221.

RTT 227 Radiation Therapy Practicum I 0 0 15 5

One of three practicum courses, this course provides clinical experience in the use of equipment and patient positioning in both simulation and the delivery of radiation therapy treatments. The student is introduced to the varied aspects of the radiation therapy department and patient progression through evaluation, treatment and follow-up. Prerequisite: RTT 214.

RTT 236 Radiation Therapy Procedures I 3 0 0 3

Treatment modalities are examined as to their application in treatment delivery. The

overall treatment plan is evaluated as to equipment selection, beam modification, patient support, use of immobilization and possible contouring methods. Prerequisite: RTT 227.

RTT 237 Radiation Therapy Practicum II 0 0 21 7

Technical skills are developed and refined within the departmental setting. Recognition of the provision for special patient needs is stressed. Routine exams are performed under supervision. Prerequisite: RTT 227.

RTT 246 Radiation Therapy Procedures II 3 0 0 3

Routine as well as new techniques in treatment delivery are explored. Discussion promotes choices the technologist will make relating to tumor site and modality selection. Trends in therapeutic techniques are presented through investigation of current literature or independent study. Prerequisite: RTT 236.

RTT 247 Radiation Therapy Practicum III 0 0 21 7

This course promotes clinical practice for the student on a more independent level of performance. The student utilizes equipment, accessories, patient care techniques and treatment considerations in the completion of radiation therapy procedures. Prerequisite: RTT 237.

SCI 101 General Science 3 0 0 3

This is a study of the basic concepts from biological, physical, and natural sciences. Prerequisite: None.

SCI 1001 Practical Physical Science 3 2 0 4

This course covers some of the basic concepts in physical science. Topics included are physical measurement, structure and properties of matter, energy-forms, production measurement and uses, gravity and friction. Emphasis on specific topics will be determined by the trade or vocational interests of the students involved. Prerequisite: None.

SOC 102 General Sociology 5 0 0 5

This is an introductory course in the principles of sociology. An attempt is made to provide an understanding of culture, collective behavior, community life, social institutions, and social change. It presents the scientific study of man's behavior in relation to other men, the general laws affecting the organization of such relationships, and effects of social life on human personality and behavior. Prerequisite: None.

SOC 103 Sociology 3 0 0 3

The student will examine the social environment in which personality develops and matures and will analyze the major social institutions as well as the major social processes involved. Attention is given to the scope, methods, and concepts of sociology. Prerequisite: None.

SOC 105 Families in the American Culture 3 0 0 3

This course is the study of the family in the American culture, changing patterns in family roles, the influence of socioeconomic status on family relationships, factors associated with cultural deprivation, and the effects on children in such families. Prerequisite: SOC 103.

SOC 209 Social Problems 3 0 0 3

This is an analysis of modern social organization and disorganization as they relate to various social problems in contemporary American society. Prerequisite: SOC 102 or SOC 103.

SOC 210 Minorities in American Society 3 0 0 3

This is a study of the historical and scientific questions of race, sociocultural patterns in various interracial areas, and inquiry into the problems of conflict adjustment. Prerequisite: None.

SOC 211 Victimology 3 0 0 3

This course introduces the student to the study of crime victims. Emphasis will be placed on the role of the victim, characteristics of crime victims, conflicts between victims and the judicial system and the available assistance to victims. Prerequisite: None.

SON 100 Orientation to Sonography 2 0 0 2

This is an introductory course in which the student learns the applications of sonography in the medical field. The basics of sound waves are introduced along with terminology specific to sonography. Prerequisite: None.

SON 111 Medical Sonography Physics I 3 0 0 3

This course is designed to provide the student of diagnostic medical sonography a knowledge of the physics of ultrasound. Topics for study include the physical properties of ultrasonic waves, their interactions with matter, their propagation and detection. Prerequisite: None.

SON 121 Medical Sonography Physics II 3 0 0 3

The study of acoustical physics is continued. Emphasis is placed on mathematical computations involving the reactions of sound with matter. The various kinds of instruments used in sonography are examined as to physical principles and medical application. Prerequisite: SON 111.

SON 132 Sectional Anatomy 3 0 0 3

The appearance of body tissue and organ systems is approached through cross-sectional anatomy. Imaging modalities to include computerized tomography and magnetic resonance imaging are compared to images produced in cross-sectional sonograms. A primary goal is to promote the student's ability to view the body in transverse perspectives. Prerequisite: BIO 108.

SON 133 Sonographic Anatomy I 4 0 0 4

This is the first of two anatomy courses that deal specifically with relational anatomy as seen in infinite scanning planes. This course is coordinated with Scanning Techniques I. The focus in this course is abdominal anatomy. Prerequisite: RDT 112.

SON 134 Sonographic Anatomy II 4 0 0 4

The second of two courses dealing in specific relational anatomy. This class is coordinated with Scanning Techniques II. The focus of this course is male and female pelvic anatomy and small parts. Prerequisite: SON 133.

SON 153 Scanning Techniques I 2 4 0 4

The first of two classes which deal with the actual art of scanning. This course is coordinated with the Sonographic Anatomy I class. Basic scanning techniques and darkroom fundamentals are discussed in lecture and lab. Prerequisite: None.

SON 154 Scanning Techniques II 1 4 0 3

This is the second of two courses that gives the student laboratory experience in abdominal and pelvic scanning. Quality assurance and departmental management are covered in the lecture portion. This course is also coordinated with Sonographic Anatomy II. Prerequisite: SON 153.

SON 240 Embryology and Fetal Development 4 0 0 4

This class is a basic embryology course dealing with the embryo from conception through twelve weeks' gestation. Fetal development is the study of fetal growth patterns from twelve weeks' gestation to birth. Fetal measurements are studied in detail at this time. Prerequisite: SON 134.

SON 250 Sonographic Pathology I 4 0 0 4

Pathological processes occurring in the abdomen are studied in this course. The focus is the soft tissue organs which are seen sonographically. This course is introduced after the student has a good understanding of the normal sonogram as learned in Sonographic Anatomy I and Scanning Techniques I. Prerequisite: SON 133.

SON 251 Sonographic Pathology II 4 0 0 4

This course focuses on gynecological pathology, male pelvic pathology and small parts pathology. The student is also introduced to fetal anomalies which are coordinated with their Embryology and Fetal Development course. Prerequisites: SON 250 and Corequisite: SON 240.

SON 256 Practicum I 2 2 15 8

This is the first of a series of five courses in which the student begins to apply knowledge learned in the classroom to the clinical situation. The student is assigned to a clinical site away from the campus. This first course introduces the student to

the working of the clinical site, darkroom technology, patient scheduling and patient care. Prerequisite: RDT 112.

SON 260 Case Studies I

2 0 0 2

This is the first of two courses or in which the student begins presenting interesting cases scanned in clinic. Each student researches the case through patient history and laboratory tests. The student then follows the case during the patient's treatment; this is done with radiologic, pathologic and surgical results. Prerequisite: SON 154.

SON 261 Case Studies II

2 0 0 2

The second of a series of two courses which deal with the presentation of interesting sonographic cases. Each case is again researched and presented by the student with critical analysis by the other students in the group. Prerequisite: SON 260.

SON 266 Practicum II

1 2 24 10

The second of five courses which give the student practical experience at a clinical site. The student is assigned to a clinical site away from the campus. Students begin completing competencies in abdominal scanning at this time. Prerequisite: SON 256.

SON 270 Sonographic Seminars

5 0 0 5

This course is designed to help the sonography student begin to put together materials in preparation for the sonography boards. The student reviews medical literature and investigates methods for continuing education after graduation. Mock registries are taken during this course. Prerequisite: SON 286.

SON 271 Introduction to Vascular and Cardiac

Sonography

3 0 0 3

This course introduces the student to applications of sonography other than those studied earlier in the curriculum. The focus is neurosonology, vascular and cardiac imaging with sound waves. Prerequisite: SON 286.

SON 276 Practicum III

0 0 24 8

The third of five practicum courses which deal with clinical experience for the student. The student is assigned to a clinical site away from the campus. Competencies in abdominal and gynecological scanning along with small parts are required of the student in this course. Prerequisite: SON 266.

SON 286 Practicum IV

0 0 24 8

This is the fourth in a series of five practicum courses in which the student gains clinical experience. Students are assigned to a clinical site away from campus. Competencies in abdominal, gynecological, small parts and obstetrics are required in this course. Prerequisite: SON 276.

SON 296 Practicum V

0 0 24 8

This is the final course in a five-course series in which the student gains practical

experience at a clinical site. The student is assigned to a clinic away from campus. Competencies in abdominal, gynecological, small parts and obstetrics are required in this course. Special rotations through cardiology, pediatric and neurosonology are done at this time. Prerequisite: SON 286.

WLD 1101 Basic Gas and Arc Welding **1 0 3 2**

The course includes welding demonstrations given by the instructor and practice by the students. The safe and proper methods in the setup and operation of welding equipment are demonstrated. Practice is given in joining metals by torch welding, brazing, silver soldering, soft soldering, and shielded metal arc mechanical repair work. Prerequisite: None.

WLD 1111 Air Conditioning Welding **0 0 3 1**

This course includes welding demonstrations by the instructor and practice by the students. The safe and proper methods in the setup and operation of welding equipment are demonstrated. Practice is given in brazing, braze welding, and hard and soft soldering of ferrous and nonferrous metals. Flame cutting methods are practiced as applicable to mechanical repair work that the air conditioning technician will encounter in the field of work. Prerequisite: None.

WLD 1113 Mechanical Testing and Inspection **1 0 3 2**

This course covers the standard methods for mechanical testing of welds. Types of tests covered are bend, destructive, free bend, guided-bend, nick-tear, notched-bend, tee-bend, nondestructive, V-notch, and Charpy impact. Prerequisite: None.

WLD 1120 Oxyacetylene Welding and Cutting **2 0 6 4**

This course provides an introduction to the history of oxyacetylene welding, the principles of welding and cutting, nomenclature of the equipment, and assembly of units. Welding procedures such as practice of puddling and carrying the puddle running flat beads, butt welding in the flat, vertical, and overhead positions, brazing, and hard and soft soldering are covered. Safety procedures are stressed throughout the program of instruction in the use of tools and equipment. The performance of mechanical testing and inspection to determine quality of the welds is made. Prerequisite: None.

WLD 1121 Basic Arc Welding **4 0 15 9**

Arc welding power source capabilities, scope of functions, components, and their care and maintenance will be covered in the course. The significance of “F” numbered electrodes and their application in the welding process will be included. Development of manipulative skills needed to make correct welds in the flat position will be an objective of the course. Safe and correct arc welding practices will be demonstrated and will be required of the students. Prerequisite: None.

WLD 1121A Basic Arc Welding (Part I) **2 0 6 4**

This course is the first part of a two-part course that covers arc welding power source

capabilities, scope of functions, components, and their care and maintenance. The significance of "F" numbered electrodes and their application in the welding process will be included. Development of manipulative skills needed to make correct welds in the flat position will be an objective of the course. Safe and correct arc welding practices will be demonstrated and will be required of the students. Prerequisite: None.

WLD 1121B Basic Arc Welding (Part II) 2 0 9 5

This course is a continuation of WLD 1121A. Prerequisite: WLD 1121A.

WLD 1123 Inert Gas Welding 1 0 6 3

This course provides an introduction and practical operations in the use of inert gas-shielded arc welding. A study of the equipment, operation, safety, and practice in the various positions is made. A study of such topics as principles of operation, shielding gases, filler rods, process variations and applications, and manual and automatic welding are also made. Prerequisite: None.

WLD 1124 Advanced Arc Welding 3 0 12 7

This course includes extensive practice in welding in all positions. The micro-wire welding process and a study of such topics as principles of operation, nomenclature of machine, filler metals, and shielding gases are included. Prerequisite: WLD 1121.

WLD 1124A Advanced Arc Welding (Part I) 2 0 9 5

This course is the first part of a two-part course that includes extensive practice in welding in all positions. The micro-wire welding process and a study of such topics as principles of operation, nomenclature of machine, filler metals, and shielding gases are included. Prerequisite: WLD 1121A and WLD 1121B.

WLD 1124B Advanced Arc Welding (Part II) 1 0 3 2

This course is a continuation of WLD 1124 A. Prerequisite: WLD 1124A.

WLD 1126 Advanced Inert Gas Welding 3 0 9 6

This course is a continuation of WLD 1123, Inert Gas Welding with more theory and practice in inert gas welding. Both ferrous and nonferrous welding applications are covered. Inert spot welding, CO₂ welding, gas-metal arc, and automatic welding are taught. Special consideration is given to shielding gases. Prerequisite: WLD 1123.

WLD 1128 Welding Procedures and Practices 1 0 6 3

This course provides an introduction to practical applications for certification procedures according to A.W.S. D1.1 as well as welding and preparing test coupons. Prerequisites: WLD 1120, WLD 1121, WLD 1124, and WLD 1126.

WLD 1129 Basic Gas Metal Arc Welding (MIG) 2 0 9 5

This course will provide instruction in the basic use of the constant potential gas metal arc welding equipment (MIG). Prerequisite: None.

WLD 1130 Applied Basic GMAW and Gas Welding 2 0 6 4

This course includes welding demonstrations given by the instructor and practice by the students. The safe and correct methods of assembling and operating welding equipment are emphasized. Practice is given in joining and surfacing of ferrous metal by brazing, braze welding, and fusion welding. The study and practice of the operations of GMAW process will be included with reference to the effects of expansion and contraction to minimize warpage of auto body components. Oxyacetylene flame cutting is practiced as applicable to auto body and chassis repair work. Prerequisite: None.

WLD 1131 Applied Inert Gas Welding and Plasma Cutting 2 0 3 3

This course includes an introduction and practical operation of the GTAW gas welding processes and plasma arc cutting processes. A study of the principles of shielding gases, filler metals, GMAW and PAC torches will be covered. Special attention is given to the joining of thin metals, both ferrous and nonferrous. Safety procedures are emphasized throughout the course. Prerequisite: None.

WLD 1140 Welding Power Sources 3 0 3 4

This course provides instruction on the correct procedures for solving maintenance problems on different types of welding electromechanical equipment found in industry. Emphasis is placed on electrical troubleshooting techniques. Prerequisite: WLD 1121 or equivalent experience.

WLD 1141 Advanced Wire Welding 2 0 6 4

This course includes extensive practice in the welding of different metals in all positions. The gas metal arc welding process is used. A study of the principles of operation, the nomenclature of machines, types of filler wires, and shielding gases are covered. Prerequisite: WLD 1126 or equivalent experience.

WLD 1142 Non-Destructive Testing I 3 0 3 4

This course is designed to develop the skills and knowledge in the area of non-destructive testing. The primary focus of the course will be on the principles and procedures of visual, eddy current and radiographic testing at ASNT Level I standards. Prerequisite: WLD 1113 or equivalent experience.

WLD 1143 Non-Destructive Testing II 3 0 3 4

This course is a continuation of Non-Destructive Testing I. The focus of the course will be on laboratory skills, selected aspects of liquid penetrant, magnetic particles and ultrasonic testing at ASNT Level I standards. Prerequisite: WLD 1142.

WLD 1144 Welding Fabrication I 2 0 3 3

This is a basic course in metal fabrication. The course will provide instruction on the identification and use of basic hand tools and measuring instruments. Safety rules, regulations and procedures will be covered. Basic procedures and processes

on the use of the shear, iron worker, press brake, box and pan brake and vertical and horizontal band saws will be introduced. Prerequisite: WLD 1124, WLD 1126, or equivalent.

WLD 1145 Welding Fabrication II **2 0 3 3**

This course provides advanced work using the shear, iron worker, press brake and band saws. Class projects will be used to develop procedures in planning, machine operations, final welding assembly, and inspection. Prerequisite: WLD 1144.

WLD 1146 Robotic Programming for Welding **1 0 6 3**

This course provides instruction on the application and programming of a five-axis robot used in the welding industry. Opportunities are provided to develop observation skills, effective techniques, and beginning skills in adapting robotic technology to the needs of industry. Prerequisite: WLD 1141 or equivalent experience.

WLD 1147 Pipe and Tube Welding **3 0 12 7**

This course is designed to provide practice in the welding of pressure piping and tubing in the horizontal, vertical, and horizontal-fixed positions using shielded metal arc and gas tungsten arc welding processes according to the ASME code. Prerequisite: WLD 1124, WLD 1126, or equivalent experience.

FACULTY/STAFF DIRECTORY

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Vice Chairman	Selvey J. Boyer
Secretary	Dr. Bob H. Greene

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	Term Expires
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Western Electric Co. (Retired)	
Joyce E. Glass	1992
Registered Nurse, Medical Park Hospital	
Brian C. Miller	1993
President, Miller Mechanical, Inc.	
Dewitt E. Rhoades	1994
CEO, DERA, Inc.	

APPOINTED BY COUNTY COMMISSIONERS

Selvey J. Boyer	1991
Instructor, Parkland High School	
Clyde F. McSwain	1992
Printing Instructor, Winston-Salem/Forsyth County Schools (Retired)	
Frances D. Kirkman	1993
Nursing Supervisor, Triad Methodist Home	
Gordon B. Hughes	1994
AT&T (Retired)	

APPOINTED BY WINSTON-SALEM FORSYTH COUNTY BOARD OF EDUCATION

C. Douglas Maynard, M.D.	1991
Chairman, Department of Radiology, Bowman Gray School of Medicine	
Beaufort O. Bailey	1992
Media Director, Winston-Salem State University	
Dr. Charlie B. Hauser	1993
Winston-Salem State University (Retired)	
North Carolina Legislator	
Robert R. Gordon, Jr.	1994
Sr. Vice President of Personnel, RJR Tobacco Company	

APPOINTED BY STUDENT GOVERNMENT ASSOCIATION

Current SGA President	Elected Annually
(Nonvoting Member)	

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Pamela I. Hall Assistant to the President for Economic Development

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Pamela I. Hall Assistant to the President
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Health Technologies
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Albert F. Mutton Associate Dean, Business Technologies
Donald C. Shoaf Associate Dean, Health Technologies/
Department Chairperson, Radiologic Technology
Laura W. Wyatt Associate Dean, General Studies/
Department Chairperson, Pretechnical
Carolyn T. Rajacich Assistant Dean, Health Technologies/
Department Chairperson, Practical Nurse Education
Phyllis D. Sample Assistant Dean, Health Technologies/Coordinator,
Associate Degree Nursing

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R. Shelton Jones Associate Dean, Occupational Extension
Frances W. Proctor Associate Dean, Occupational Extension/Health Related
Cheryl D. Byerly Coordinator, Adult High School
Sarah C. Coleman Coordinator, Adult Basic Education
Chris F. Hooper Coordinator, Fire Service Training

Paula J. McCoy Coordinator, Assessment/Retention
 Anne M. Teachey Assessment/Retention Assistant, Literacy Program
 James B. Weiss Literacy Recruiter
 Deborah J. Gaddy Workplace Literacy Specialist

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 Randall A. Robertson Operator/Programmer
 Susan B. Denny Programmer/Software Technician

Auxiliary and Physical Plant Services

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 Lillie B. Clark Supervisor, Custodial and Housekeeping
 Patricia M. Lewis Supervisor/Faculty Staff Service Center
 Robert L. Wallace Supervisor, Maintenance
 Jean P. Young Manager, Bookstore
 Jo Ann S. Galyean Coordinator, Operations

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 Jan P. Neas Director, Financial Services
 Rebecca M. VanderKlok Director, Student Financial Services
 William M. Bigham Coordinator, Equipment

Marketing and Publications

Jean R. Perkins Coordinator
 Brenda B. Bodsford Graphic Designer
 Patricia K. McClive Printing Specialist

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Library Services

Audrey B. Zablocki Director
 John D. Briggs Audiovisual Librarian
 Thomas F. Gordon, Jr. Reader Services Librarian
 Polly C. King Head Library Technical Assistant
 Jennifer Y. Springs Library Technical Assistant

Student Job Placement

Barbara J. Barringer Director

Student Activities

R. Kenneth Bradstock Facilitator

Student Services

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George McLendon	Director, Admissions and Career Guidance Center
J. Bruce Shepherd	Director, Records and Recruitment
Gloria L. Sexton	Coordinator, WINS Program
Sandra W. Suggs	Admissions Counselor
Sharon L. Vaughn	Admissions Counselor
E. Lorraine Wood	Admissions Counselor
Sam L. Beck	Counselor
Charles R. King	Counselor
Colleen R. Richardson	Counselor
Brenda A. Green	Records and Registration Assistant
Barbara J. Bergstrom	Records Technician

Institutional Research

Dr. Sarah E. Hutslar	Dean
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Participant Service Center

Veronica M. Ford	Coordinator
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Visiting Artist

Jean Valjean Cutler	Writer/Director
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PERSONNEL AND EVENING PROGRAMS

Larry V. Weaver	Administrative Assistant
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Public Safety

Lester G. Brown	Director
Larry G. Beane	Officer
Sammy D. Dillon	Officer
Thomas P. Johnson	Officer

FACULTY AND STAFF

- Affeldt, Harley P. Dean, Engineering Technologies Division
B.S., M.Ed., Virginia Polytechnic Institute; Ed.D., Nova University
- Allen, Marvin L. Associate Vice President and Dean, Business Technologies
B.A., Davidson College; M.B.A., East Carolina University; Nova University graduate program
- Allred, Sammy L. Accounting
B.S., M.A., Appalachian State University
- Allred, Susan R. Executive Vice President, Administrative Services
B.A., Coker College; M.Ed., College of William and Mary; Ed.S., George Washington University; Ed.D., University of North Carolina at Greensboro
- Atkins, Harold L. Department Chairperson, Horticulture Technology
B.S., M.S., North Carolina State University
- Barringer, Barbara J. Director, Student Job Placement
B.A., Catawba College; M.A., University of Delaware
- Beck, Sam L. Counselor
B.A., M.A., Wake Forest University; further graduate study, Wake Forest University
- Bigham, William M. Equipment Coordinator
A.B.T., High Point College; graduate study, North Carolina State University
- Boren, Jerre D. Associate Degree Nursing
R.N., Duke University School of Nursing; B.S., Richmond Professional Institute; M.A., University of North Carolina at Chapel Hill; further graduate study, University of North Carolina at Greensboro
- Briggs, John D. Audiovisual Librarian
B.S., M.A., Appalachian State University
- Brown, Edward I. Department Chairperson, Plumbing
Licensed plumbing contractor with experience in residential and commercial contracting
- Brown, J. Gregory Associate Dean, Community Service Programs
A.A.S. Surry Community College, B.S.; M.A., Appalachian State University

- Brown, Lester G. Director, Public Safety
Sworn Deputy Sheriff
- Bryan, Lori D. Associate Dean, Occupational Extension
B.S., Campbell University; M.Ed., North Carolina State University
- Bullins, Adelia T. Medical Sonography
A.A.S., Forsyth Technical Community College; B.S., North Carolina State University
- Burns, Herbert I. Department Chairperson, Architectural Technology
B.A., University of Kentucky
- Byerly, Cheryl D. Coordinator, Adult High School and GED
B.A., University of North Carolina at Greensboro; M.A., Appalachian State University
- Byers, Samuel A. Physics
B.S., M.S., North Carolina A & T State University
- Canavan, Amanda Humanities
B.A., Creighton University; M.A., Wake Forest University
- Cathey, Jerri E. Associate Dean, Literacy Program
A.B., University of North Carolina at Chapel Hill; M.Ed. University of North Carolina at Greensboro
- Chandler, Joseph W., III Accounting
B.S., University of South Carolina; CPA, State of North Carolina; continuing study, American Institute of CPA's and NCACPA
- Clanton, Rachel T. Radiologic Technology
A.R.R.T., A.A.S., Forsyth Technical College; B.S., Gardner-Webb College; further study, Winston-Salem State University
- Clary, Robert A. Business Computer Programming
B.S.B.A., M.A., Appalachian State University
- Coleman, Sarah C. Coordinator, Adult Basic Education
B.S., M.S., North Carolina A & T State University
- Conner, Anne B. Department Chairperson, Medical Sonography
A.A.S., Virginia Western Community College
- Corey, Grace B. Dean, General Studies Division
B.S., M.Ed., University of North Carolina at Greensboro

- Cranfill, Robin Mathematics
B.S., University of North Carolina at Greensboro; M.Ed., North Carolina State University
- Cutler, Jean V. Visiting Artist
B.A., Lynchburg College; M.A., Ph.D., University of Illinois
- Dalton, Patricia G. Department Chairperson, Administrative Office Technology
B.S., M.Ed., University of North Carolina at Greensboro; further graduate study, North Carolina State University, Appalachian State University, Wake Forest University
- Darden, Jean L. Practical Nurse Education
R.N., Watts Hospital School of Nursing; B.S.N., Winston-Salem State University
- Davis, Pauline R. Practical Nurse Education
R.N., Bon Secours School of Nursing; B.S.N., University of Pennsylvania
- Day, Garry H. Department Chairperson, Graphic Arts
B.S., Appalachian State University
- DeVane, Gloria H. Pretechnical
B.S., North Carolina Central University
- Dillard, Betty G. Humanities
B.A., Winston-Salem State University; M.A., Wake Forest University
- Dosier, Ernestine W. Associate Degree Nursing
R.N., B.S.N., Winston-Salem State University; M.Ed., North Carolina A & T State University; further graduate courses, Wake Forest University
- Eddy, Roger A. Electronics Engineering Technology
B.S., M.Ed., Ohio State University; Registered Professional Engineer
- Fain, Adeline E. Dean, College Transfer/Individualized Learning Center
A.B., Washington University; M.A.Ed., University of North Carolina at Greensboro; Ph.D., University of North Carolina at Chapel Hill
- Fishel, Wilburn C. Department Chairperson, Automotive Body Repair
Experience in auto body repair; certified State Fire Service Instructor, DuPont Refinishers Center diploma
- Fleeman, T. Glen, Jr. Executive Vice President
B.S., Concord College; M.Ed., University of North Carolina at Greensboro
- Foltz, Daniel O. Department Chairperson, Electronic Servicing
Vocational Diploma in Communications, Vocational Diploma in Home Entertainment Electronics Systems, Specialist Certificate in Fundamentals of Electronics, Specialist Certificate in Basic Electronic Circuit Applications, DeVry Technical Institute

- Ford, Veronica M. Coordinator, Participant Service Center
B.A., North Carolina Central University; M.S., North Carolina A & T State University
- Forrest, William C. Humanities
B.A., University of North Carolina at Charlotte; M.A., Appalachian State University
- Fox, Mary B. Practical Nurse Education
A.A./A.A.S.N., Lincoln Land Community College; B.S.N., MacMurray College
- Gaddy, Deborah J. Workplace Literacy Specialist
B.A., M.A., Western Carolina University
- Gibson, Christina R. Radiation Therapy Technology
A.R.R.T. Radiologic Technologist; A.R.R.T. Radiation Therapy Technologist
- Goforth, D. Shelton Department Chairperson, Life Sciences
B.S., M.A., Appalachian State University
- Gordon, Merrill J. Associate Coordinator, Academic Computer Services/
Instructor, Business Computer Programming
A.A.S., Forsyth Technical College; B.A.S., Guilford College
- Gordon, Thomas F., Jr. Reader Services Librarian
A.B., Duke University; M.S., University of North Carolina at Chapel Hill
- Grady, Stanley D. Department Chairperson, Business Computer Programming
B.S., North Carolina A & T State University; M.S., University of North Carolina at Greensboro
- Grant, E. Carter Electronics Engineering Technology
B.S., M.S., North Carolina State University; M.S., University of Michigan
- Gray, Retta W. Humanities
B.A.E., University of Florida; M.A., Appalachian State University; further graduate study, University of Florida, Florida State University, Western Carolina University, Jacksonville University, Davidson College
- Green, Brenda A. Records and Registration Assistant
B.A., Winston-Salem State University
- Greene, Bob H. President
B.S., M.A., Appalachian State University; Ed.D., Nova University
- Groce, Kelly L. Individualized Learning Center
A.A.S., Surry Community College; B.A., M.A., Appalachian State University

- Grose, Odell H., Jr. Department Chairperson, Carpentry
Experience in the field of carpentry
- Hage, E. Elaine Humanities
B.A., Washington Bible College; M.Ed., Lynchburg College
- Hagman, Sandra S. Business Computer Programming
B.A., M.A., Virginia Polytechnic Institute; Secondary Certification in English, University
of Delaware; additional graduate study, University of Texas at San Antonio
- Haire, Martha L. Practical Nurse Education
R.N., North Carolina Baptist Hospital School of Nursing; B.S., Wake Forest University;
graduate study, North Carolina State University, Wake Forest University
- Haith, Sylvia A. Social Sciences
B.A., North Carolina Central University; M.A., Appalachian State University; further
graduate study, North Carolina Central University, University of North Carolina at
Chapel Hill, University of South Carolina
- Hall, Pamela I. Assistant to the President for Economic Development
A.A., Louisburg College; A.B., University of North Carolina at Chapel Hill;
M.A.Ed., East Carolina University
- Hanes, Kenneth D. Department Chairperson, Electrical Installation
Electrician Apprenticeship Program, Forsyth Technical College, licensed electrical
contractor
- Harkness, Donald G. Department Chairperson, Nuclear Medicine Technology
A.A.S., Forsyth Technical College; B.S.N.M.T., Medical College of Georgia; M.Ed.,
University of North Carolina at Greensboro
- Henley, Noah R. Life Sciences
B.S., M.A., Appalachian State University.
- Hennis, Anne R. Director, Focused Industrial Training
B.S., Appalachian State University; M.B.A., University of North Carolina at
Greensboro
- Hill, Dorothy F. Early Childhood Specialist
B.S., North Carolina Central University; M.Ed., Winthrop College
- Hinson, Tommy R. Department Chairperson, Mathematics
A.A., Wingate Junior College; B.S., Appalachian State University; M.Ed., University
of North Carolina; further graduate study, Wake Forest University
- Holland, Carolyn M. Department Chairperson, Radiation Therapy Technology
A.A.S., Caldwell Community College

- Hooper, Chris F. Coordinator, Fire Service Training
A.A.S., Rowan Technical Community College
- Howell, Benjamin L. Director, Counseling Services
B.A., Wake Forest University; M.A., Appalachian State University
- Hulcher, Mark C. Automotive Mechanics
A.A.S., Guilford Technical Community College; Vocational Diploma in Automotive
Mechanics, Specialist Certificate in Electronic Engine Controls, Forsyth Technical
Community College
- Hutslar, Sarah E. Dean, Institutional Research
B.S., The Ohio State University; M.Ed., Miami University; Ph.D., The Ohio State
University
- Jacobson, Sheri L. Associate Degree Nursing
B.S.N., University of North Carolina at Greensboro
- Johnson, Shirley L. Associate Degree Nursing
Vocational Diploma, Practical Nursing, Forsyth Technical Community College;
B.S.N., Winston-Salem State University
- Johnson, Thomas P. Public Safety Officer
Sworn Deputy Sheriff, EMT
- Jolly, Drusilla B. Life Sciences
B.S., M.A., Appalachian State University
- Jones, Jerry A. Business Computer Programming
B.S., North Carolina State University
- Jones, Lester M. Department Chairperson, Air Conditioning, Heating,
and Refrigeration
Graduate, Coyne Electrical School; Certified Refrigeration Service Engineer, Philco
Ford Corporation Training Program; State Certification North Carolina; further
study, Lake Michigan College
- Jones, R. Shelton Associate Dean, Occupational Extension
B.S., M.S., Virginia Polytechnic Institute; undergraduate work William and Mary
College-Norfolk; advanced study, University of North Carolina at Greensboro;
further study Western Michigan University, Virginia Commonwealth University
Extension
- Kahl, George H. Department Chairperson, Diesel Vehicle Maintenance
A.A.S., Milwaukee Institute of Technology; B.S., Stout University; undergraduate
study Drake University; M.Ed., University of North Carolina at Greensboro;
Journeyman Certificate, Diesel Mechanics

- Kandara, Nicholas G. Mechanical Drafting and Design Technology
B.A., Guilford College
- Keith, Joyce W. Comptroller
A.A.S., Forsyth Technical College
- Kinch, Virgie C. Horticulture Technology
A.A.S., Forsyth Technical College; B.S., Winston-Salem State University; M.S.,
North Carolina State University
- King, Charles R. Counselor
A.A., University of North Carolina at Wilmington; A.B., East Carolina University;
M.Ed., University of North Carolina at Greensboro
- King, Mary L. Practical Nurse Education
R.N., Mayview Hospital School of Nursing; B.S.N., Winston-Salem State University
- Lawing, Barry A. Humanities
B.A., Mars Hill College; M.A., Wake Forest University
- Lee, Linda M. Associate Dean, General Studies/
Department Chairperson, Humanities
A.B., Wake Forest University; M.Ed., University of North Carolina at Greensboro
- Lehmann, Kenneth L. Business Administration
B.B.A., Western Reserve University; M.S., Postsecondary Technical Education,
University of Akron; further graduate study, University of Illinois, Oberlin College,
Case Western Reserve University, American Management Association
- Lester, Joy K. Pretechnical
A.A., Wingate Junior College; B.A., Clemson University; M.A.T., The Citadel
- Lore, B. Ann Associate Degree Nursing
R.N., Robeson County Memorial School of Nursing; B.A., Pfeiffer College; M.Ed.,
University of North Carolina at Greensboro; Ed.D., Nova University
- Lowery, Luther M. Associate Degree Nursing
R.N., B.S.N., North Carolina A & T State University
- Lundgren, Loren W. Business Administration
B.S., Northern Illinois University; graduate study Northern Illinois University, North
Carolina State University, University of North Carolina at Greensboro
- Marion, William M. Architectural Technology
A.A.S., Forsyth Technical Community College; B.A., University of North Carolina
at Charlotte

- Marotz, William H. Coordinator, Academic Computer Services/
Department Chairperson, Computer Engineering Technology
B.S., M.S., Stout State University; further graduate studies, West Virginia University
- McCoy, Paula J. Coordinator, Assessment/Retention
B.S., North Carolina A & T State University
- McInnis, Nancy L. Associate Degree Nursing
R.N., B.S.N., Lenoir Rhyne College; M.S.N., Emory University
- McLendon, George Director, Admissions and Career Guidance Center
B.S., Winston-Salem State University; M.S., North Carolina A & T State University;
further graduate study, Lenoir Rhyne College, Wake Forest University, University of
North Carolina at Greensboro
- McSwain, George L., Jr. Department Chairperson,
Law Enforcement Technology
B.S., M.A., Appalachian State University; Diploma, North Carolina S.B.I. Academy
- Metts, Alvin S. Department Chairperson, Physics
B.S., North Carolina State University; graduate study, Radford College, University
of North Carolina at Greensboro; Certificate in Computer Programming, Winston-
Salem State University
- Mobley, Patricia A. Associate Degree Nursing
R.N., Crawford W. Long Memorial Hospital; B.S.N., Winston-Salem State University;
M.S.N., University of North Carolina at Greensboro
- Morgan, Gwen R. Associate Degree Nursing
B.S.N., University of North Carolina at Charlotte
- Mutton, Albert F., Jr. Associate Dean, Business Technologies
B.S., M.S., East Tennessee State University; registered cardiopulmonary technologist
- Neas, Jan P. Director, Financial Services
A.A.S., Forsyth Technical Community College; B.S., Gardner-Webb College
- Neumann, Leslie L. Department Chairperson, Social Sciences
B.S., Wayne State University; M.A.Ed., Wake Forest University
- Newman, Carol B. Pretechnical
A.B., Meredith College; M.S., Florida State University
- O'Connor, Brian R. Lead Instructor, Individualized Learning Center
B.A., Saint Joseph's College; graduate study, Wake Forest University

- O'Pharrow, Richard L. Physics
B.S., Johnson C. Smith University; M.A.T.M., University of Detroit; further graduate study, Fisk University and Vanderbilt University
- Owens, Florence Associate Degree Nursing
R.N., B.S.N., Winston-Salem State University; graduate study, University of North Carolina at Greensboro
- Parker, Carol W. PC Administrator, Business Technologies
Diploma, King's Business College; further study, Forsyth Technical Community College
- Parola, John D. Automotive Mechanics
A.S.E. Diploma, Southern Illinois University Vocational Training Institute; Automotive Certification, Ford Motor Company
- Patton, Gray R. Business Computer Programming
B.A., University of North Carolina at Greensboro
- Perkins, Jean R. Coordinator, Marketing and Publications
B.A., Winston-Salem State University; further study, Radford University and Forsyth Technical College; special training in Advertising and Public Relations; certificate in Multi-Media Communications
- Petree, Robin N. Department Chairperson, Machinist
Vocational Diploma in Machinist program, A.A.S., Forsyth Technical Community College; further study, University of North Carolina at Charlotte
- Phelps, Susan Q. Dean, Student Services
B.A., University of South Carolina; M.A., Appalachian State University; Ed.D., University of North Carolina at Greensboro
- Pope, Bonnie G. Associate Degree Nursing
R.N., B.S.N., University of North Carolina at Charlotte; Certified ASPO, Childbirth Educator; Certified OB/GYN Ultrasonographer
- Potter, Linda S. Associate Degree Nursing
R.N., B.S.N., Lenoir Rhyne College
- Proctor, Frances W. Associate Dean, Occupational Extension/
Health and Related
R.N., Rex Hospital School of Nursing; further study, Winston-Salem State University, University of North Carolina at Chapel Hill, Saint Joseph's College
- Queen, Garland W. Electronics Engineering Technology
B.S., University of North Carolina at Charlotte; M.S., Clemson University

- Rajacich, Carolyn T. Assistant Dean, Health Technologies/
Department Chairperson, Practical Nurse Education
R.N., Rowan Memorial Hospital; B.S.N., Winston-Salem State University; further
graduate study, University of North Carolina at Greensboro
- Reeves, Derrick A. Welding and Metal Fabrication
Diploma, Welding and Metal Fabrication, Forsyth Technical Community College
- Richardson, Colleen R. Counselor
B.A., Appalachian State University; M.A.Ed., Wake Forest University
- Ritchie, Clyde F., Jr. Radiologic Technology
A.R.R.T., North Carolina Memorial Hospital, University of North Carolina at Chapel
Hill; B.S., Alderson-Broaddus College
- Robbins, Frederick A. Manufacturing Engineering Technology
A.A.S., Forsyth Technical College
- Rogers, Jerry D. Director, Auxiliary and Physical Plant Services
Experience in retail management; National Association of College Stores, Management
Survey Certificate
- Roth, Thomas M., Jr. Department Chairperson,
Electromechanical Technology
B.S., Rice University
- Rousseau, James A. Vice President, Planning and Development
B.S., Knoxville College; M.S., North Carolina A & T State University; Ed.S.,
Virginia State College; further graduate study, Appalachian State University, Virginia
Polytechnic Institute and State University
- Safarian, Beverly A. Director, Administrative Computer Center
A.A.S., Forsyth Technical College
- Sallee, Athene W. Pretechnical
B.A., Wayland College; M.Ed., University of Oklahoma; M.A., Appalachian State
University; further graduate study, University of North Carolina at Greensboro
- Sample, Phyllis D. Assistant Dean, Health Technologies/
Coordinator, Associate Degree Nursing
R.N., B.S.N., University of Bridgeport; M.Ed., North Carolina A & T State University
- Saylor, Richard L. Mathematics
B.S., Wake Forest University; M.Div., Reformed Theological Seminary; Ph.D., Rice
University
- Sexton, Gloria L. Coordinator, WINS Program
B.A., Saint Augustine College; M.S., North Carolina A & T State University

- Sharpe, Franklin R. Diesel Vehicle Maintenance
Mack Truck Training Center, Cummins Engine Training Center, Detroit Diesel
Training Center, Ford Motor Training Center
- Shepherd, J. Bruce Director, Records and Recruitment
B.S., M.A., Appalachian State University; Ed.S., University of North Carolina at
Greensboro; Ed.D. in progress, University of North Carolina at Greensboro; further
graduate work, East Carolina University, Western Carolina University
- Sheppard, Perry W. Respiratory Therapy Technology
R.R.T., C.C.P.T., C.R.T.T., R.C.P.T., A.A.S., Forsyth Technical Community College;
B.S., Gardner-Webb College; further study, Medical College of Georgia
- Sherrill, Sharon L. Humanities
A.B., Guilford College; M.A., Wake Forest University; Ed.D., University of North
Carolina at Greensboro
- Shields, Sheila B. Social Sciences
B.A., Appalachian State University; M.Ed., Wake Forest University
- Shirk, Robert D. Pretechnical
B.R.E., Piedmont Bible College; B.A., Salem College; M.S.H.E., University of
North Carolina at Greensboro; Ed.S., University of North Carolina at Greensboro
- Shoaf, Donald C. Associate Dean, Health Technologies/
Department Chairperson, Radiologic Technology
R.R.T., A.A.S., Forsyth Technical College; A.B., High Point College; M.Ed.,
University of North Carolina at Greensboro; further graduate study, University of
North Carolina at Greensboro
- Sigmon, Shelley R. Humanities
B.A., University of North Carolina at Charlotte; M.A., University of North Carolina
at Chapel Hill
- Sineath, Alice B. Department Chairperson, Accounting
B.S.B.A., M.A., Appalachian State University
- Sineath, Bythel J. Business Computer Programming
A.A., Rockingham Community College; B.S., Appalachian State University; M.Ed.,
Ed.D., University of North Carolina at Greensboro
- Skinner, Sara B. Mathematics
A.B., Atlantic Christian College; M.A.T., University of North Carolina at Chapel
Hill; further graduate study, University of North Carolina at Greensboro
- Smith, Rodney T. Department Chairperson, Welding and Metal Fabrication
Diploma, Forsyth Technical College; B.R.E., Piedmont Bible College

- Smith, Teresa P. Nuclear Medicine Technology
A.A.S., Forsyth Technical College; B.S., Greensboro College; M.S., North Carolina
A & T State University
- Snider, Jerri R. Business Computer Programming
A.A.S., Forsyth Technical Community College; B.S., High Point College; M.B.A.,
Appalachian State University
- Spurgeon, Thelma W. Administrative Office Technology
B.A., Bennett College; M.B.E., University of North Carolina at Greensboro
- Staley, Thomas R. Department Chairperson, Business Administration
B.S., Appalachian State University; M.Ed., University of North Carolina; further
graduate study, Guilford College, North Carolina State University
- Stoltz, Herbert E. Automotive Mechanics
Disc Brake School, Automotive Tune-up School, G.M. Training Center; experience
in the field of automotive mechanics
- Suggs, Sandra W. Admissions Counselor
B.A., Wingate College
- Sutphin, Donald G. Department Chairperson,
Manufacturing Engineering Technology
Diploma, Forsyth Technical College; A.A.S., Davidson County Community College;
B.E.T., University of North Carolina at Charlotte
- Tarr, Jeanette L. Life Sciences
B.S., M.A., Ed.S., Appalachian State University
- Taylor, Thomas A. Life Sciences
B.S., M.S., North Carolina State University; credit toward Ph.D., North Carolina
State University; additional graduate study, University of North Carolina at Greensboro
- Teachey, Anne M. Assessment/Retention Assistant, Literacy Program
B.S., University of North Carolina at Greensboro; additional study, Wake Forest
University, North Carolina State University
- Tedder, Jake D. Business Administration
A.A., Pfeiffer College; B.S., University of North Carolina at Chapel Hill; M.Ed.,
University of North Carolina at Greensboro
- Tennis, Heidi A. Physical Education
B.S., Grand Valley State College; M.A., Western Michigan University
- Tobias, Carole K. Business Computer Programming
B.S., University of South Carolina; additional study, The Citadel

- Tripp, Ellen L. Humanities
A.B., Emerson College; M.A., Winthrop College; Ph.D., University of North Carolina at Greensboro
- Trotter, Donald L. Department Chairperson,
Electronics Engineering Technology
B.S.E.E., North Carolina State University; North Carolina Registered Professional Engineer
- Tuttle, Jacqueline M. Pretechnical
B.S., High Point College
- Tuttle, Jeffrey L. Department Chairperson, Banking and Finance
B.S., M.A., Appalachian State University
- Tyndall, E. Ann Director, Small Business Center
B.S., M.S., East Carolina University; Ph.D., University of North Carolina at Greensboro
- Tyndall, Robert A. Physics
B.S., M.A., East Carolina University; further graduate study, University of North Carolina at Greensboro
- VanderKlok, Rebecca M. Director, Student Financial Services
A.A.S., Forsyth Technical College; B.S.A.S., Winston-Salem State University
- VanHorn, JoAnn E. Department Chairperson,
Respiratory Therapy Technology
C.R.T.T., R.R.T., A.A.S., Forsyth Technical College
- Vaughn, Sharon L. Admissions Counselor
B.A., University of North Carolina at Chapel Hill
- Vestal, Betty D. Mathematics
B.S., Appalachian State University; M.A., Wake Forest University; further graduate study, University of North Carolina at Greensboro
- Weaver, Larry V. Administrative Assistant,
Personnel and Evening Programs
A.A.S., Rowan Technical Institute; A.A.S., Forsyth Technical College; B.S.A.S., Winston Salem State University; M.Ed., University of North Carolina at Greensboro
- Weiss, James B. Literacy Recruiter
B.A., University of North Carolina at Chapel Hill
- Wheat, William H. Electronics Engineering Technology
B.S., University of Iowa

- Whisnant, Patricia N. Department Chairperson, Early Childhood Specialist
B.S., Wake Forest University; M.Ed., University of North Carolina at Greensboro
- White, Linda H. Associate Degree Nursing
B.S.N., University of Alabama; M.S.N., Vanderbilt University
- Wilder, William B. Department Chairperson, Automotive Mechanics
Certified by National Institute for Automotive Service Excellence (N.I.A.S.E.);
further study, Chowan College, Forsyth Technical College, General Motors Training
Center
- Williams, Ann M. Mathematics
B.A., St. Andrews College; M.A., University of North Carolina at Charlotte
- Williams, L. T. Assistant Vice President and Dean, Continuing Education
B.S., Western Carolina University; M.Ed., University of North Carolina at Greensboro;
further graduate study, North Carolina State University
- Winning, James R. Assistant Vice President and Dean, Health Technologies
B.S., Clemson University; M.A., East Tennessee State University; Ed.D., Nova
University
- Wood, E. Lorraine Admissions Counselor
B.S., North Carolina Central University; further study, Forsyth Technical College
- Wright, Mark F. Humanities
B.A., M.A., Wake Forest University
- Wyatt, Laura W. Associate Dean, General Studies/
Department Chairperson, Pretechnical
B.S., Towson State University; M.Ed., University of North Carolina at Greensboro
- Yena, Sallie S. Department Chairperson, Marketing and Retailing
A.B., Catawba College; M.A., Appalachian State University
- Zablocki, Audrey B. Director, Library Services
B.S., Appalachian State University; M.Ed., University of North Carolina at Greensboro;
further graduate study, University of North Carolina at Chapel Hill, Wake Forest
University

SUPPORT PERSONNEL

Angell, W. Kay	Secretary, Associate Dean of Literacy Program
Bailey, Dorothy A.	Switchboard Operator
Baker, Carolyn A.	Cashier/Secretary, Bookstore
Bayse, Audrey G.	Secretary, Assessment/Retention
Black, JoAnn	Cashier/Bookkeeper
Blackburn, Ruby M.	Secretary, Adult Basic Education and Adult High School
Bloom, Carol C.	Secretary, Student Job Placement
Boger, Dawn W.	Secretary, Director of Auxiliary and Physical Plant Services
Bowen, Karen A.	Staff Associate, Business Technologies
Brooks, Yvonne P.	Secretary/Purchasing Assistant
Burnette, Carroll	Maintenance Mechanic
Bush, Pamalia J.	Housekeeper
Chandler, Terri G.	Secretary, Counseling Center
Charles, Frances N.	Secretary, Associate Dean of Community Service Programs
Cremedy, Castina C.	Housekeeper
Crobsy, Bonita P.	Housekeeper
Dalton, Sandra J.	Secretary, Student Services
Davis, Regina R.	Financial Aid Assistant
DeWitt, Linda R.	PC Lab Assistant, Business Technologies
Dickens, Carolyn M.	Secretary, Dean of Continuing Education
Dillard, Rose B.	Secretary, Pretechnical
Dreger, Christine F.	Executive Secretary
Edwards, Michael J.	Maintenance Mechanic
Farmer, Jessie M.	Secretary, Continuing Education
Fishel, Ruby B.	Secretary, Continuing Education
Gathings, Cynthia J.	Secretary, Vice President of Planning and Development
Gordon, Margaret B.	Secretary, Associate Dean of Occupational Extension
Greely-DuBose, Jacqueline	Accounts Payable Bookkeeper
Greene, Marilyn B.	Secretary, Continuing Education
Grey, Tanya L.	Secretary, Associate Dean of Occupational Extension/Health Related
Griffin, Linda R.	Records Technician
Grubbs, Julia S.	Secretary, Dean of Health Technologies Division
Hayes, T. Annette	Secretary, Business Technologies
Higgins Jr., Roger E.	Maintenance Mechanic
Hix, Michelle A.	Secretary, Economic Development
Hopper, Rhonda A.	Tutor Coordinator, ILC
Hough, James M.	Painter

Ivey, Wilson A.	Mailroom Clerk
James, Dolores J.	Secretary, Continuing Education
Jones, Donna B.	Housekeeper
Kiger, Marsha C.	Secretary, Continuing Education
Larkin, Betty L.	Housekeeper
Lehman, Carol R.	Secretary, Admissions and Career Guidance Center
Leonard, Jeffrey A.	Public Safety Officer
Leonard, L. Jill	Secretary, Faculty/Staff Service Center
Leonard, William T.	Maintenance Mechanic
Lindsay, Vickie L.	Secretary, Records and Recruitment
Link, Doris C.	Secretary, Admissions
Mabe, Stephanie B.	Secretary, Student Services
Martin, Sheila H.	Payroll Bookkeeper
Matthews, Hoke R.	Groundskeeper
McCaskill, Michael L.	Groundskeeper
McCormick, Karen M.	Secretary, Administrative Assistant
Mecum, Anna F.	Secretary, Dean of Engineering Technologies Division
Millaway, Louise J.	Switchboard
Mitchell, Sheila S.	Receptionist, Admissions
Morgan, Tammy L.	Bookstore Clerk
Myers, Marsha M.	Mailroom Clerk
Nelson, Christen	Housekeeper
Palmer, Gentry A.	Daytime Custodian
Pegram, Lucille L.	Secretary, Director of Student Financial Services
Perryman, Juanita S.	Secretary, Fire Service Training
Phillips, Dawn M.	Secretary, Health Technologies
Piercey, Barbara A.	Secretary, Director of Library Services
Pike, Ruth M.	Secretary, Continuing Education
Quesenberry, Scot R.	Maintenance Mechanic
Ragland-Todd, Judith A.	Secretary, Continuing Education
Reynolds, Gerald W.	Lab Assistant, CIM Project
Roseboro, Ardeal	Maintenance Mechanic
Sheff, Michael T.	Custodian
Shirk, Louise R.	Cashier, Business Office
Shore, Christy D.	Secretary, Business Technologies
Shore, Shannon	Secretary, Public Safety
Shumate, Ann P.	Secretary, Dean of College Transfer and ILC
Sizemore, Rhonda C.	Secretary, Admissions
Slater, Shirley L.	Executive Secretary
Smith, R. Craig	Public Safety Officer
Smith, Willie	Custodian
Spanolia, Bobbie O.	Secretary, Records and Recruitment
Springs, Ruth E.	Housekeeper
Stuckey, Allene	Housekeeper
Swaim, Cathy S.	Staff Associate, Business Office

Tan, Chio H.	Data Systems Specialist, Continuing Education
Triplette, Amy L.	Secretary, Practical Nurse Education
Vernon, Carole S.	Secretary, Administrative Assistant
Warner, Susan L.	Secretary, Marketing and Publications
Weaver, Cindy D.	Secretary, Dean of Student Services
Webb, Minnie E.	Secretary, Records and Recruitment
Willard, Melissa A.	Secretary, Health Technologies
Williams, Flossie M..	Housekeeper
Williamson, Paul A.	Groundskeeper
Wise, Barbara T.	Secretary, Dean of General Studies

North Carolina Baptist Hospital

Bowman Gray Medical Center

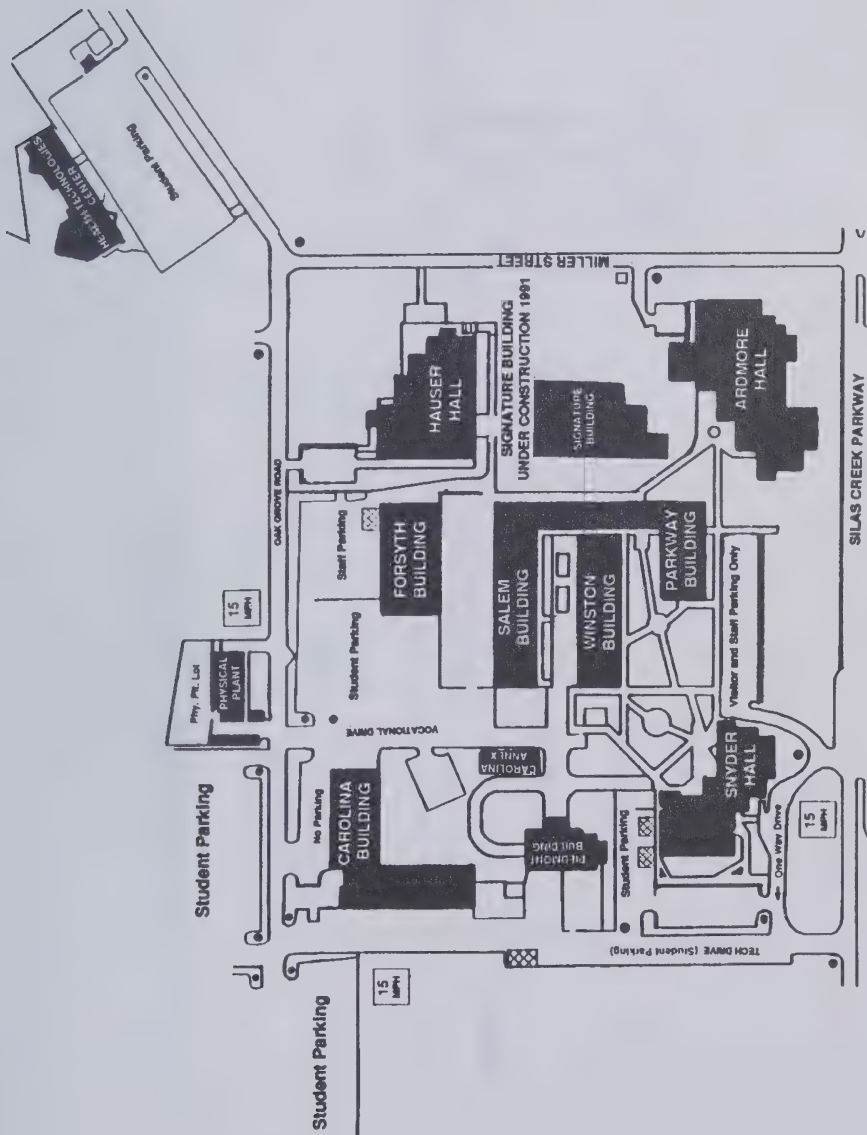


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|--------------------------------|---------------------------|
| 1. Reynolds Tower | 14. Carpenter Library |
| 2. Clinical Sciences Building | 15. Hanes Building |
| 3. New In-Patient Tower | 16. Babcock Auditorium |
| 4. Brenner Children's Hospital | 17. Power Plant |
| 5. Watlington Hall | 18. AHEC |
| 6. Coronary Care Unit | 19. Allied Health |
| 7. Progressive Care | 20. Pastoral Care |
| 8. Family Practice | 21. Emeritus House |
| 9. MRI Center | 22. AHEC |
| 10. Helicopter Pad | 23. Ronald McDonald House |
| 11. Emergency Room Entrance | 24. AirCare Offices |
| 12. Davis Chapel | 25. ARIC |
| 13. Gray Building | |

FTCC Main Campus

2100 Silas Creek Parkway
Winston-Salem, NC

Information on more detailed parking
areas may be obtained through the
FTCC Public Safety Office



FTCC West Campus

1300 Bolton Street
Winston-Salem, NC



Notes



Forsyth Technical Community College
2100 Silas Creek Parkway
Winston-Salem, NC 27103-5197

